



CITY OF MANCHESTER.

REPORT


ON THE

Health of the City of Manchester,

1935

BY

R. VEITCH CLARK, M.A., M.B., CH.B., B.Sc., D.P.H.



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PUBLIC HEALTH DEPARTMENT,
SUNLIGHT HOUSE,
QUAY STREET,
MANCHESTER, 3,
3RD AUGUST, 1936.

MY LORD MAYOR, ALDERMEN
AND MEMBERS OF THE CITY COUNCIL.

I have the honour to submit my report on the health of the City for the year 1935, which has been compiled in accordance with the memorandum of the Ministry of Health. The report is so arranged that information on any specific section may be readily obtained.

The following are the principal facts in the general vital statistics for the year :—

Population.

The estimated population to the middle of 1935 is 776,028, of which 365,637 are males and 410,391 females.

Marriage Rate.

The marriage rate for the year is 17·2. This is a decrease of 0·8 on the rate for 1934, and is 0·4 higher than the average for the last five years

Birth Rate.

The birth rate (14·5) is 0·3 lower than the previous year, and 1·0 lower than the average for the last five years.

Death Rate.

The death rate is 12·9, being 0·7 higher than the rate in 1934. The average death rate for the past five years is 13·1.

Infantile Mortality.

The rate of 71·3 per 1,000 births is 2·3 higher than the previous year the average for the past five years being 78·39.

Maternal Mortality.

The maternal mortality rate of 3·64 is 0·61 lower than in 1934, and 0·48 less than the average of the past five years.

The provisional maternal mortality rate for England and Wales for 1935 is 3·93.

Cancer.

The cancer death rate of 1.68 is the highest recorded, and is 0.08 higher than 1934 and 0.11 higher than the average for the past five years.

Tuberculosis.

The death rate from all forms of tuberculosis during the year is 1.04, as against 1.13 in the previous year. The average death rate for the previous five years is 1.23. The death rate for pulmonary tuberculosis is 0.92 and for non-pulmonary tuberculosis 0.12. Both these rates are the lowest recorded.

Housing.

In January, 1935, there was appointed for the first time an Assistant Medical Officer of Health—Dr. A. M. M. Grierson—in charge of the special department of slum clearance and other housing activities provided for in recent legislation. Dr. Grierson has had very considerable experience of this work in other cities, and has already proved his worth in his new post.

It is not necessary in this general note to refer to more than slum clearance, in so far as housing work is concerned. The record of facts, *i.e.*, houses represented, number of areas approved confirmed by the Minister, etc., are to be found on pages 410 to 413 of the report.

Particular attention is directed to the report of the privately and independently conducted investigation by three ladies—Mrs. Gates, Mrs. Chorlton and Miss Fremantle—into the actual personal experiences and opinions of 500 families transferred from slum clearance areas to City housing estates. The value of this report can scarcely be overstressed. It is an investigation of the reactions and conclusions of the housewives of the families so transferred and is, therefore, an unquestionably accurate reflection of the mental and physical attitude of these families to their new environment. It is in fact the considered judgment of the transferred families as to the value and effect of the new rehousing. From the point of view of daily human life, it is as conclusive a piece of evidence as could be desired in justification of the clearance of slums and the rehousing of dispossessed slum dwellers under modern conditions.

On pages 458 to 469 is also to be found an account of the organisation of the survey into overcrowding and the report of the survey as required by the Housing Act, 1935. The percentage of overcrowding in the City on the standard laid down in the Act is 2.1,

The general vital statistics also give very clear evidence of the improvement in health which is associated with the living conditions on the new housing estates. The following table gives these facts:—

CITY OF MANCHESTER.

BIRTH RATE, DEATH RATE AND INFANT MORTALITY OF CORPORATION HOUSING ESTATES FOR THE YEAR 1935, COMPARED WITH THE SAME RATES FOR THE CITY AND FOR TWELVE CLEARANCE AREAS.

	Population	Birth Rates	Infant Mortality Rates	General Death Rates (All Ages)
Manchester Corporation Housing Estates (1935)	92,714	15·5	61·2	7·04
Twelve Clearance Areas (Five Years' Average)	37,700	22·5	120·4	17·32
City (1935)	776,028	14·5	71·3	12·91

In this table the birth rate and the infant mortality rate are both of them accurate figures inasmuch as the rates are calculated, in the first case, upon the actual population of the new estates, and, in the second case, upon the actual number of births occurring during the year in the new estates. It is to be noted that the infant mortality rate is 10 per 1,000 lower in the new estates than in the City as a whole, and is almost exactly half that of the "clearance areas." The general death rates are crude death rates, and, in the strict statistical sense, are not accurate since they are crude. By this is meant that the population of the new estates is, as a whole, younger in years than that of the City generally, and therefore there should be a correction in the form of an age factor to make the figure from the estates strictly comparable with that for the City as a whole.

The difference between the crude death rates, however, 7 per 1,000 and 13 per 1,000, for the estates and City respectively, is so wide that there is no doubt that even when the age correction factor is applied there will still remain a very considerable balance in favour of the housing estates.

Thirdly, we have the additional very striking and conclusive evidence contained in the annual report of the School Medical Officer for the City (Dr. Henry Herd) for the year 1934, pages 10 and 11, where it is shown that the growth both in height and in weight of boys and girls is definitely

greater in new housing estates than in the older parts of the City. The following figures showing the aggregate gains in height and weight from 5 to 11 years are extracted from Dr. Herd's report referred to :—

	HEIGHTS				WEIGHTS			
	Schools on Northern Estate	Wythen-shawe Schools	City Schools	Anthropometrical Committee	Schools on Northern Estate	Wythen-shawe Schools	City Schools	Anthropometrical Committee
BOYS ..	ins. 14·65	ins. 14·48	ins. 9·10	ns. 11·3	lbs. 39·52	lbs. 30·42	lbs. 29·18	lbs. 25·9
GIRLS ..	17·12	12·85	10·41	11·7	40·44	33·09	29·68	26·4

The general observations of the whole of the staff engaged in the regular visitation of the families in their homes confirm the views expressed in the above paragraphs, and there can be no possible doubt but that the new housing provided by the City in itself has produced a continued and very definite improvement in the physical and mental well-being of those dwelling in the new estates.

Hospitals.

This year the report on hospitals under the charge of the Public Health Committee is in an extended form. In particular, there has been instituted for the first time a systematic analysis of cases treated in hospitals and all hospital work generally. This is made possible by the organisation of a special system of mechanical analysis of case cards in the Central Department. The method of record and analysis is gradually being applied to all sections of the department, with very marked saving in time and labour in the preparation of all information upon which evolutionary work must necessarily depend. It is inadvisable to draw conclusions from one year's analysis of hospital cases, and no effort is made, therefore, to do so in this report. There is, nevertheless, no doubt but that the information which is now available will, in the future, prove of great value as a basis of knowledge upon which can be founded the proper provision and organisation of hospital accommodation for the sick of the City. Not only is this true in so far as the bulk of hospital provision is concerned, but with the accumulation of such knowledge, it will be more practicable to arrange units in hospitals in which can be assembled patients suffering from certain groups of diseases.

Such grouping in "units" by the conservation of equipment, as well as by the closer assembly of skilled and experienced staff, must always be one of the aims of a well-organised hospital service, and can only be effectively considered upon the basis of such a case analysis as is now made possible.

In so far as detail is concerned, only one matter need be referred to—that of the maternal mortality in the obstetrical sections of Crumpsall and Withington Hospitals. In these hospitals the maternal mortality figure for 1935 is 3·79; the corresponding figure for England and Wales is 3·93; and for the City the maternal mortality figure for 1935 is 3·64. It is noteworthy that the maternal mortality figure for our hospitals is lower than that for England and Wales, and is only slightly in excess of that of the City. This is not only a tribute to the work of the hospitals, but is especially so in view of the fact that the proportion of complicated cases dealt with in the hospitals is greater than the corresponding figure in the domiciliary maternity of the City. In the hospitals approximately one-fourth of the cases were complicated; in domiciliary midwifery the corresponding number was less than one-sixth.

District Medical Service.

On page 265 is given an account of the position in 1935 of the proposed reorganisation of the District Medical Service.

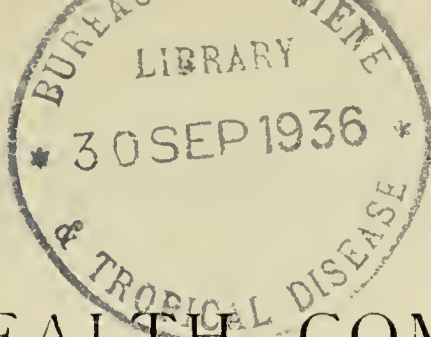
This matter is still *sub-judice*, and is awaiting definite confirmation or otherwise of the proposals from the Ministry of Health.

I have the honour to be,

Your obedient Servant,

R. VEITCH CLARK,

Medical Officer of Health.



PUBLIC HEALTH COMMITTEE, 1935-36.

Chairman :

Councillor S. MEADOWCROFT.

Deputy Chairman :

Alderman R. S. HARPER, J.P.

THE LORD MAYOR

(Alderman T. S. Williams, J.P.).

Alderman W. T. Jackson, J.P.

„ A. James, J.P.

„ Annie Lee, J.P.

Councillor A. Cathcart

„ Dr. W. Chadwick

„ R. G. Edwards, J.P.

„ F. Farrington

„ Mary A. Gibbons

„ Ellen Griffiths

„ W. Hallows

„ T. Harrison

Councillor M. L. Kingsmill Jones,
O.B.E., J.P.

„ T. M. Larrad

„ Sarah Laski

„ J. H. Meachin, J.P.

„ W. Onions

„ J. E. Pheasey

„ H. A. E. Ramsden

„ W. Somerville, J.P.

„ Professor F. E. Tylecote,
J.P.

„ J. Watts

STATISTICAL.

The following are general statistics for the year 1935 :—

Area of the City in acres	27,257
Census population for the year 1931	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> {Males .....360,976} {Females .....405,402} </div> <div>..... 766,378</div> </div>
Estimated population at the middle of year 1935	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> {Males .....365,637} {Females .....410,391} </div> <div>..... 776,028</div> </div>
No. of persons per acre.....	28
Persons married per 1,000 of population in the area of the Manchester Union	17·18
Live Births in the City of Manchester..	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> {Males 5,658} {Females ... 5,618} </div> <div>..... 11,276</div> </div>
Live birth-rate per 1,000 of population	14·53
Still-births	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> {Males 309} {Females ... 237} </div> <div>..... 546</div> </div>
Deaths	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> {Males 5,206} {Females ... 4,813} </div> <div>..... 10,019</div> </div>
Recorded annual death-rate per 1,000 of population	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> {Males 14·24} {Females ... 11·73} </div> <div>..... 12·91</div> </div>
Deaths under 1 year of age per 1,000 births	71·30
Excess of registered births over deaths.....	1,257
Percentage of mortality occurring in public institutions	51·23

No. of occupied Structurally Separate Dwellings at the Census in April, 1931	177,430
No. of persons per occupied Structurally Separate Dwelling (Census 1931)	4·32
No. of persons per house 1935 (Based on 198,827 houses connected with the water supply within the City)	3·90
No. of new houses erected during 1935 :—	
By Local Authority	1,379
By other bodies or persons	1,821
	————— 3,200

PUBLIC HEALTH OFFICERS.

(A) MEDICAL.

Medical Officer of Health	.. .. .	R. Veitch Clark, M.A., M.B., CH.B., B.SC., D.P.H.	
Senior Assistant Medical Officer of Health		W. St. Clair McClure, M.R.C.S., L.R.C.P., D.P.H.	
Senior Tuberculosis Officer	.. .. .	D. P. Sutherland, M.B., B.S.	
Assistant Medical Officer of Health— (Hospitals, etc.)	.. .. .	J. S. Taylor, M.D., D.P.H.	
Assistant Medical Officer of Health— (Maternity and Child Welfare)	..	Nora F. Smith, M.B., B.S., D.P.H.	
Assistant Medical Officer of Health— (Housing)	.. .. .	A. M. M. Grierson, M.D., D.P.H.	
Assistant Medical Officer of Health (General)	..	F. N. Marshall, M.D., M.R.C.S. B.SC., D.P.H.	
Assistant Tuberculosis Officers	.. .. .		5
<hr/>			
Medical Officers, Child Welfare Centres	.. .. .		9
„ „ „ „	(part-time)	.. ..	4
Dental Surgeons (part-time)	.. .. .		2

Abergele Sanatorium.

Medical Superintendent—J. E. Geddes, M.D., CH.B.

One Deputy Medical Superintendent and one Assistant Medical Officer.

Baguley Sanatorium.

Medical Superintendent—H. G. Trayer, B.A., M.B., CH.B., D.P.H.

One Deputy Medical Superintendent.

Two Assistant Medical Officers.

(A) MEDICAL—*continued*.*Monsall Hospital.*

Medical Superintendent—D. S. Sutherland, M.D.

One Deputy Medical Superintendent.

Four Assistant Medical Officers.

Booth Hall Hospital.

Medical Superintendent—J. T. D'Ewart, M.B.

One Deputy Medical Superintendent.

One Resident Surgical Officer.

Four Assistant Medical Officers.

Withington Hospital and Institution.

Medical Superintendent—M. Gamble, M.B.E., M.D.

One Deputy Medical Superintendent.

One Resident Surgical Officer.

One Resident Obstetrical Officer.

One Assistant Resident Obstetrical Officer.

Six Assistant Medical Officers.

Crumpsall Hospital and Institution.

Medical Superintendent—W. A. Ramsay, M.A., M.D.

One Deputy Medical Superintendent.

One Resident Surgical Officer.

One Resident Obstetrical Officer.

One Assistant Resident Obstetrical Officer.

Six Assistant Medical Officers.

Langho Colony.

Medical Superintendent—J. Shearer, M.B., CH.B.

In addition, there are the consulting staffs of these various hospitals.

District Medical Officers under Poor Law Acts	28	} Chiefly combined
Public vaccinators	26	
		appointments.

(B) OTHERS.

Veterinary Surgeon—Richard C. Locke, M.R.C.V.S., D.V.S.M. (VICT.).
Public Analyst—Harri Heap, M.SC., F.I.C.
„ (Assistant)—Alfred N. Leather, B.SC. (LOND.), F.I.C.

Sanitary Inspectors.

Chief—Isaac Priestley, M.R.S.I., M.S.I.A.	..	I
Divisional .. .. .	..	2
Senior Housing .. .. .	..	I
Housing .. .. .	..	8
Special to the Medical Officer of Health .. .. .	..	2
Drainage .. .. .	..	2
Food and Drugs .. .. .	..	3
Smoke .. .. .	..	4
Rat Officers .. .. .	..	2
Canal Boats .. .. .	..	I
Milk Control .. .. .	..	3
House Drainage .. .. .	..	2
District .. .. .	..	46
Rag flock, and floating .. .. .	..	I
Houses—let—in—Lodgings.. .. .	..	4
Women, Workshops, etc. .. .. .	..	2
Total .. .. .	..	84

Maternity and Child Welfare.

Superintendent of Health Visitors .. .. .	..	I
„ „ „ (Assistant) .. .. .	..	I
Inspector of Midwives .. .. .	..	I
„ „ (Assistant) .. .. .	..	I
Midwives .. .. .	..	4
Ophthalmic Nurses .. .. .	..	3
Centre Superintendents .. .. .	..	15
Health Visitors .. .. .	..	60
Cleansing Nurse .. .. .	..	I
Masseuses .. .. .	..	8
Total .. .. .	..	95

Tuberculosis.

Sanitary Inspectors.. .. .	..	3
Nurses .. .. .	..	13
Vaccination Officers .. .. .	..	4

CITY OF MANCHESTER (299, OLDHAM ROAD)—METEOROLOGY, 1935. (Means of the Monthly Readings.)

	Barometer	Dry Bulb	Wet Bulb	Humidity	Maximum Temperature	Minimum Temperature	Mean Temperature in Shade	Sun Maximum	Grass Maximum	One Foot	Four Feet	Total Rainfall (inches)	Total No. of Wet Days	Total Hours of Sunshine	Average Mean Daily Temperature 1881-1915 (extracted from the book of normals)	Average Rainfall 1892-1935	Average Hours of Sunshine 1892-1935	Fog Noted
January ..	30.263	40.6	38.9	84	44.3	38.4	41.4	52.9	35.3	41.5	46.0	1.83	18	10.0	39.1	3.06	11.3	13th, 21st, 22nd, 27th, 28th, 29th.
February ..	29.648	42.4	40.8	87	47.2	39.6	43.4	60.8	32.3	41.7	44.5	3.41	22	14.3	40.1	2.38	29.8	9th, 26th.
March ..	30.147	43.9	41.9	83	49.9	41.0	45.5	75.4	33.3	42.5	44.2	1.64	13	68.3	42.3	2.37	73.5	16th, 17th, 20th, 21st, 27th.
April ..	29.760	46.9	43.9	77	54.1	41.8	48.0	89.5	35.3	45.8	46.4	2.52	19	119.3	46.8	1.97	113.6	6th, 7th, 14th, 22nd, 23rd.
May ..	30.135	52.1	46.1	61	61.5	43.8	52.7	99.0	41.5	51.8	50.2	0.83	9	213.0	52.6	2.32	143.6	
June ..	29.872	61.5	56.0	70	68.8	54.3	61.6	107.0	50.9	58.9	54.7	3.35	21	146.0	58.4	2.41	152.4	
July ..	30.074	64.9	58.3	66	72.6	57.5	65.1	112.7	51.6	64.4	60.6	1.58	12	184.6	60.8	2.94	140.5	
August ..	29.958	63.0	57.6	71	72.1	56.7	64.4	108.7	51.1	64.3	62.3	1.68	10	148.2	59.9	3.60	119.5	
September ..	29.776	56.6	52.7	77	63.0	51.9	57.5	97.4	46.6	58.3	60.7	5.61	23	90.0	56.4	2.69	99.2	
October ..	29.743	48.9	46.5	83	54.0	45.1	49.6	74.7	40.4	50.7	55.1	6.40	26	32.3	49.8	3.55	55.1	1st, 20th, 21st, 22nd, 25th.
November ..	29.601	45.0	43.3	87	48.8	42.1	45.5	64.4	37.7	45.6	50.3	4.58	25	19.2	43.6	3.00	18.0	24th, 25th.
December ..	29.579	38.2	36.6	85	41.6	35.6	38.6	48.8	32.9	38.8	45.3	3.35	17	3.5	40.4	3.38	6.8	4th, 5th, 6th, 12th, 13th, 16th, 17th, 18th, 19th, 20th, 21st, 22nd, 23rd, 28th.
YEAR ..	29.880	50.3	46.9	78	56.5	45.7	51.1	82.6	40.7	50.4	51.7	36.78	215	1048.7	49.2	33.68	963.3	

The extent to which Institutions are used is to some extent represented in the following table :—

TABLE I.
DEATH-RATES IN THE HOMES OF THE PEOPLE AND IN INSTITUTIONS
FOR 5 YEARS 1931-1935.

YEAR	Estimated Populations to middle of Year	Death-rate per 1000 of persons dying in their own homes	Death-rate per 1000 of persons dying in Institutions	Total death-rate per 1000
1931	766,378	7·4	6·5	13·86
1932	768,745	6·2	6·8	13·03
1933	771,165	7·0	6·4	13·41
1934	773,593	6·2	6·0	12·24
1935	776,028	6·3	6·6	12·91

The chief causes of death are shown below for each of the years 1930-1935 :—

TABLE 2.

	1930	1931	1932	1933	1934	1935
Tuberculosis of the Lungs ..	903	855	770	773	751	711
Tuberculosis (other forms) ..	174	132	126	114	125	95
Diseases of the Heart	1398	1642	1747	1961	1728	1697
Cerebral Hæmorrhage, Apoplexy, Hemiplegia	426	494	449	362	366	403
Pneumonia	879	1010	905	841	664	769
Bronchitis	661	866	531	551	380	460
Digestive Organs	354	337	354	361	346	376
Atrophy, Debility (Chiefly in infants)	55	45	28	22	32	37
Old Age	378	416	361	353	426	625
Premature Birth	252	231	229	227	207	236
Nephritis and Bright's Disease ..	319	311	289	261	257	226
Convulsions	32	34	44	21	32	30
Inflammation of the Brain ..	36	17	25	25	24	28
Diarrhœa and Dysentery	153	151	116	97	132	86
Measles	146	65	122	48	97	98
Scarlet Fever	16	8	18	16	14	15
Whooping Cough	37	86	80	47	35	46
Diphtheria	58	60	80	85	84	57
Influenza	129	340	181	536	89	221
Malignant Disease	1153	1240	1258	1175	1237	1306

TABLE 3.

Gains and Losses in 1935 per 1,000 persons living, as compared with the average for the 10 years 1925-1934.

Gains.

Scarlet Fever	0·01
Measles	0·02
Whooping Cough	0·07
Phthisis	0·20
Tubercular Meningitis	0·04
Tubercular Peritonitis: Tabes Mesenterica	0·01
Tubercular Diseases (other)	0·03
Premature Birth	0·02
Nervous Diseases	0·05
Bronchitis	0·52
Pneumonia	0·21
Enteric Fever	0·01
Influenza	0·12
Urinary System	0·05
Diphtheria	0·04
Diarrhœa	0·13
Total	<u>1·53</u>

Losses.

Puerperal Fever	0·01
Digestive System	0·03
Cancer	0·18
Erysipelas	0·01
Diseases of the Heart and Blood Vessels	0·33
Old Age	0·30
Total	<u>0·86</u>
Balance of Gains from above Causes	0·67
„ „ all Causes	0·58

INFANTILE MORTALITY.

TABLE 4.

Deaths per 1,000 births at the ages 0-2 months, 3-5 months, and 6-11 months in successive years.

YEARS	Months of Age			
	0-2	3-5	6-11	Under 1 year
1891-1895 (mean) ..	82.79	40.99	62.97	186.75
1896-1900 (mean) ..	83.44	42.43	66.28	192.16
1901-1905 (mean) ..	81.02	37.52	54.24	172.78
1906-1910 (mean) ..	73.89	29.12	44.27	147.28
1911-1915 (mean) ..	69.23	24.38	39.26	132.88
1916-1920 (mean) ..	58.46	17.72	28.65	104.82
1921-1925 (mean) ..	52.46	15.63	27.38	95.45
1926-1930 (mean) ..	49.77	15.76	22.33	87.86
1931-1935 (mean) ..	49.01	11.92	15.97	76.90
1931	50.61	13.31	19.92	83.84
1932.	51.80	14.05	19.56	85.41
1933	48.93	11.25	14.75	74.93
1934	45.29	10.91	12.83	69.03
1935	48.42	10.11	12.77	71.30

Table 5 allows a comparison with former years in respect of the infantile mortality rates from different causes for the whole of the first year of life.

TABLE 5.

CITY OF MANCHESTER.

CAUSES OF DEATH	DEATHS UNDER ONE YEAR PER 1,000 BIRTHS					
	1930	1931	1932	1933	1934	1935
All causes	78·73	83·84	85·41	74·93	69·03	71·30
Smallpox .. .. .	..	..	..	..	..	..
Chickenpox .. .. .	..	0·08	0·42	..	..	..
Measles	3·00	0·90	2·20	0·63	1·57	1·42
Scarlet Fever .. .. .	..	0·08	..	..	..	0·18
Whooping Cough.. .. .	1·53	2·29	2·62	1·62	1·05	1·60
Diphtheria	0·23	0·49	0·25	0·09	..	..
Erysipelas	0·46	0·33	0·42	0·45	0·52	0·44
Tuberculous Meningitis	0·38	0·73	0·42	0·09	0·70	0·18
Abdominal Tuberculosis	0·15	..	0·08	0·18	0·09	0·09
Other Tuberculous Diseases	0·69	0·33	0·25	0·54	0·35	0·27
Meningitis (<i>not Tuberculous</i>)	0·77	0·65	0·59	0·27	0·52	0·36
Convulsions	2·14	2·12	3·30	1·80	2·36	2·13
Bronchitis	5·44	5·88	3·81	3·42	1·13	1·60
Pneumonia (all forms)	11·33	15·59	16·40	13·58	7·41	8·78
Diarrhoea and Enteritis	10·57	10·86	8·63	7·83	10·38	6·83
Gastritis.. .. .	0·77	..	..	..	..	..
Syphilis	0·77	0·65	1·19	0·54	0·35	0·44
Rickets	0·15	0·08	0·42	0·36	..	0·18
Injury at Birth	2·37	3·26	2·37	2·43	2·27	2·93
Atelectasis	1·76	2·04	2·62	3·06	2·88	2·04
Congenital Malformation	5·44	5·96	7·19	6·92	6·81	7·63
Premature Birth	19·30	18·78	19·38	20·42	18·06	20·93
Atrophy, Debility, and Marasmus	4·06	3·67	2·20	1·89	2·79	3·19
Overlying, found dead in bed, and suffocation.. .. .	0·38	0·74	0·34	0·54	1·05	0·80
Other causes.. .. .	7·04	8·65	9·76	8·19	8·73	9·32

PUBLIC ASSISTANCE.

On page 12 a table is shown giving the number of persons who were in receipt of relief from the Manchester Public Assistance Committee during the last week in each month of the years 1935 and 1934.

*Cases maintained by or chargeable to the Public Assistance Committee
on the 1st January, 1936.*

(A) RETURN OF MENTAL CASES.

Institution	Class of Case Maintained	Suffering from Mental Infirmity
<i>1. Establishments</i>		
<i>Belonging to Manchester :—</i>		
Crumpsall Institution	General Hospital and Lunacy	687
Swinton Home	Mentally deficient children..	92
<i>2. County Mental Hospitals :—</i>		
Lancaster	Persons of unsound mind ..	418
Prestwich	„ „ ..	844
Winwick	„ „ ..	561
Whittingham	„ „ ..	259
Rainhill	„ „ ..	160
Other County Mental Hospitals	„ „ ..	10
Sandlebridge School, Alderley Edge.	Mentally defective adults ..	5
Cumnor Rise Home, Botley, Oxford	Feeble-minded girls	2
Stoke Park Colony, Bristol	} Feeble-minded persons ..	{ 20
Whittington Hall, Chesterfield ..		
Durran Hill House, Carlisle	Mentally defective women .	5
St. Joseph's Home, Sudbury	Feeble-minded young women	1
Total		3,070

THE NUMBER OF PERSONS WHO WERE IN RECEIPT OF RELIEF FROM THE MANCHESTER
PUBLIC ASSISTANCE COMMITTEE DURING THE LAST WEEK IN EACH MONTH OF
THE YEARS 1935 AND 1934.

	1935		1934	
	Indoor	Out-door	Indoor	Out-door
January	3,428	54,490	3,651	56,997
February	3,435	48,822	3,619	57,288
March	3,326	44,374	3,539	56,376
April	3,299	45,050	3,484	56,153
May	3,279	43,539	3,444	55,400
June	3,219	43,009	3,387	54,979
July	3,226	42,055	3,408	52,238
August.. .. .	3,232	42,181	3,379	51,690
September	3,280	42,181	3,370	51,408
October	3,292	42,945	3,379	52,017
November	3,310	43,273	3,421	53,485
December	3,334	45,841	3,447	55,776

TABLES

1935

TABLE A.—MANCHESTER, 1935

CAUSES OF DEATH AT DIFFERENT LIFE PERIODS IN THE 52 WEEKS OF THE YEAR
PERSONS.—(MALES AND FEMALES.)

CAUSES OF DEATH	AGES AT DEATH													
	All Ages	UNDER 5 YEARS		5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
		0 to 1	1 to 5											
All Causes	10019	804	338	115	91	148	238	459	672	1183	1848	2293	1516	314
A.—GENERAL DISEASES.....	3675	562	199	67	49	89	144	259	309	490	658	603	230	16
B.—LOCAL DISEASES	5331	191	123	43	36	50	76	161	321	639	1115	1455	929	192
C.—OTHER SPECIFIED DIS...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
D.—ILL-DEFINED DISEASES...	689	38	1	...	...	...	...	...	3	5	25	186	329	102
E.—VIOLENT DEATHS	324	13	15	5	6	9	18	39	39	49	50	49	28	4
A.—General Diseases.														
Smallpox.. { Vaccinated .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Not Vaccinated ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ No Statement.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vaccinia	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Chickenpox	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Measles	98	16	79	3	...	...	...	...	...	...	...	...	...	...
Rubella .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever..	15	2	9	3	...	1	...	...	...	...	...	...	...	...
Typhus .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	221	3	6	3	4	1	7	19	25	41	51	30	28	3
Whooping Cough	46	18	26	2	...	...	...	...	...	...	...	...	...	...
Mumps	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Diphtheria...	57	...	20	27	9	...	...	...	1	...	...	...	...	...
Poliomyelitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro-spinal Fever	28	10	8	3	1	2	...	3	...	1	...	...	...	...
Simple Cont : Fever.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	4	...	...	...	2	1	...	...	1	...	...	...	...	...
Asiatic Cholera .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Epidemic Diarrhœa	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	84	76	8	...	...	...	...	...	...	...	...	...	...	...
Dysentery	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Malarial Fever.....	1	...	...	...	...	...	...	...	...	1	...	...	...	...
Trench Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Actinomycosis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hydrophobia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Glanders.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anthrax .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tetanus	4	...	...	...	...	...	...	1	...	2	1	...	...	...
Syphilis	34	5	...	...	...	...	...	2	3	11	12	1	...	...
Gonorrhœa, Strict : Urethra....	6	...	...	...	...	...	...	...	...	...	1	4	1	...
Puerperal.. { Septicæmia	20	...	...	...	...	...	1	13	6	...	...	...	...	...
{ Pyæmia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Phlegmasia Dol..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Fever.....	4	...	...	...	...	...	...	2	2	...	...	...	...	...
Infective Endocarditis	17	...	...	1	1	2	4	4	4	1	...	...	...	...
Leprosy .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Psittacosis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	38	5	...	...	...	1	...	4	4	4	8	7	4	1
Septicæmia (not puerp :).....	15	2	...	1	2	...	1	1	1	1	4	2	...	...
Pyæmia (not puerp :).....	1	...	...	...	...	...	...	...	...	...	1	...	...	...
Phlegmon	23	3	...	1	1	...	...	1	2	2	4	6	3	...
Phagedæna .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Septic Diseases.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tubercular Phthisis	666	3	...	7	4	52	90	144	116	145	73	29	2	1
Phthisis	45	...	2	...	...	4	3	8	6	10	8	3	1	...
Tubercular Meningitis.....	43	2	15	7	5	4	3	1	4	1	1	...	...	...
Tubercular Peritonitis	13	1	2	...	...	2	...	3	3	1	1	...	...	...
Tabes Mesenterica	1	...	...	...	...	...	...	1	...	...	...	...	...	...

TABLE A, 1935—continued.

CAUSES OF DEATH	AGES AT DEATH													
	All Ages	UNDER 5 YEARS		5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
		0 to 1	1 to 5											
3. DISEASES OF HEART.														
Valvular Dis : Endocarditis	334	...	1	1	5	4	11	22	44	54	59	78	50	5
Pericarditis	5	...	1	1	...	...	...	...	...	2	1	...	...	...
Hypertrophy of Heart.....	1	...	...	...	...	...	...	...	...	...	1	...	...	...
Angina Pectoris	122	...	...	...	...	...	...	...	6	18	54	30	11	3
Dilatation of Heart	36	...	...	1	...	...	...	...	...	8	5	14	7	1
Fatty Degen : of Heart	35	...	...	...	...	...	...	1	1	6	17	8	2	...
Syncope, Heart Disease.....	1164	2	3	...	1	...	5	13	28	95	243	411	295	68
4. DIS : OF BLOOD VESSELS.														
Arterio Sclerosis	476	...	...	...	...	...	...	...	4	24	80	195	143	30
Cerebral Hæmorrhage.....	369	6	...	...	...	...	...	3	7	40	89	140	70	14
<i>Apoplexy, Hemiplegia</i>	34	...	1	...	...	...	...	...	...	3	5	19	5	1
Aneurism	15	...	...	...	...	...	...	...	1	5	3	6	...	...
Senile Gangrene	20	...	...	...	...	...	...	...	...	...	...	13	4	3
Embolism, Thrombosis	155	...	...	1	...	...	...	1	6	16	39	43	39	10
Phlebitis.....	5	...	...	...	...	...	...	...	1	1	2	...	1	...
Varicose Veins	5	...	...	...	...	...	...	...	...	...	1	1	3	...
Blood Vessels (Other Diseases)	29	...	...	...	...	...	...	...	2	9	8	6	4	...
5. DIS : OF RESPIRATORY SYS :														
Laryngitis	2	...	2	...	...	...	...	...	...	...	...	...	...	...
Memb: Laryng: (Not Diphth:)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Croup.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Larynx (Other Dis:)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	460	18	7	2	...	2	...	4	13	52	87	133	117	25
Pneumonia { Lobar-Croupous.	382	11	15	2	7	12	2	32	60	84	91	37	10	1
{ Broncho-Lobular.	373	86	54	3	2	4	3	9	21	26	62	63	34	6
<i>"Pneumonia"</i>	14	2	...	1	...	...	...	...	1	3	4	2	1	...
Emphysema, Asthma	27	...	...	...	...	...	1	3	3	5	7	6	2	...
Pleurisy	14	...	2	2	1	...	...	1	...	3	5	...	...	...
Fibroid Disease of Lung.....	1	...	...	...	...	...	...	...	...	...	1	...	...	...
Respiratory Dis: (Other)	71	1	...	1	...	...	2	...	5	10	7	17	18	10
6. DIS: OF DIGESTIVE SYS:														
Tonsillitis, Quinsy	25	...	1	1	2	1	...	3	4	4	6	2	1	...
Mouth, Pharynx	1	...	1	...	...	...	...	...	...	...	...	...	...	...
Gastric Ulcer.....	74	...	...	...	...	...	...	6	18	16	22	10	2	...
Gastric Catarrh.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Stomach (Other Dis:)	4	3	...	...	...	...	...	...	...	...	...	...	1	...
Enteritis.....	24	...	2	1	...	...	3	2	4	2	1	3	5	1
<i>Gastro-Enteritis</i>.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Appendicitis, Perityph :	56	...	4	2	4	4	4	5	5	15	6	6	1	...
Hernia	36	...	...	...	...	...	1	...	...	6	11	14	4	...
Intestinal Obstruct:.....	51	6	2	...	...	1	2	2	5	5	8	12	6	2
Other Diseases of Intestines ...	7	...	...	1	...	1	...	...	...	2	2	...	1	...
Peritonitis	21	1	2	1	1	...	...	3	2	2	4	3	2	...
Cirrhosis of Liver	14	...	...	1	...	...	...	...	1	1	6	4	1	...
Liver	4	...	...	...	...	...	...	...	1	...	2	1	...	...
Biliary Calculi	14	...	...	...	...	...	...	1	2	2	3	3	3	...
Digestive System (Other Dis:)	45	1	2	...	...	1	...	2	3	8	7	13	8	...
7. DIS : OF LYMPHATIC AND DUCTLESS GLANDS.														
Spleen, Disease of.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lymphat: Syst: (Other Dis:)	24	2	...	...	...	2	...	2	8	3	5	2	...	...
Thyroid Body (Other Dis:)	1	...	...	...	...	...	1	...	...	...	...	...	...	...
Addison's Dis : (Dis: of)	4	...	...	...	...	...	...	1	1	1	1	...	...	...
8. DISEASES OF URINARY SYSTEM.														
Nephritis Ac: Uræmia	32	...	5	2	3	1	2	2	1	4	4	3	4	1
Ch : Bright's Dis : Albumin : ...	194	...	1	1	...	2	3	11	15	26	43	60	28	4
Calculus	5	...	...	...	...	...	...	...	...	3	1	...	1	...
Bladder and Prostate Dis : ...	79	1	...	...	...	...	...	...	1	4	17	30	24	2
Urinary Syst : (Other Dis:)	32	...	...	...	1	...	3	...	3	5	10	5	4	...

TABLE A, 1935—concluded.

CAUSES OF DEATH	AGES AT DEATH													
	All Ages	UNDER 5 YEARS		5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
		0 to 1	1 to 5											
9. DISEASES OF GENERATIVE SYSTEM.														
Ovarian Tumour	5	...	...	...	...	...	...	1	1	1	1	1	...	...
Other Dis : of Ovary	3	...	...	...	...	...	...	...	...	2	...	1	...	...
Uterine Tumour .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Dis: of Uterus and Vagina	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Disord: of Menstruation .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gener: and Mam: Orgs: (Other)	6	...	...	...	...	...	1	1	1	1	1	1	...	...
10. DISEASES OF PREGNANCY AND CHILDBIRTH.														
Abortion, Miscarriage	1	...	...	...	...	1	...	...	...	...	...	...	...	...
Puerperal Mania .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Convulsions .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Placenta Præv: Flooding	2	...	...	...	...	...	...	...	2	...	...	...	...	...
Other Ac: of Preg: & Childbirth	16	...	...	...	...	1	1	7	6	1	...	...	...	...
11. DISEASES OF LOCOMOTOR SYSTEM.														
Caries, Necrosis	2	...	...	...	...	...	...	...	...	...	1	...	1	...
Arthritis, Periostitis	10	...	...	...	...	...	...	...	1	2	3	3	1	...
Locomotor Sys : (Other)	6	...	...	1	...	...	...	1	1	...	2	1	...	...
12. DISEASES OF THE SKIN.														
Carbuncle, Boil	9	...	...	...	...	...	1	...	1	2	2	2	1	...
Ulcer, Bedsore	1	...	...	...	...	...	...	...	...	...	1	...	...	...
Eczema	7	2	...	1	...	...	...	...	...	...	...	1	2	1
Penphigus	3	3	...	...	...	...	...	...	...	...	...	...	...	...
Skin Diseases (Other)	12	5	2	...	...	...	...	...	...	...	3	...	1	1
C.—Other Specified Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...
D.—Ill-defined and not Specified Diseases.														
Atrophy, Debility	37	36	1	...	...	...	...	...	...	...	...	...	...	...
Old Age	625	...	...	...	...	...	...	...	...	...	17	180	327	101
Dropsy, Ascites, Anasarca .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tumour	23	...	...	...	...	...	...	...	3	4	7	6	2	1
Abscess .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hæmorrhage .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sudden (cause unascertained)...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Ill-defined	4	2	...	...	...	...	...	...	...	1	1	...	...	...
E.—Violent Deaths.														
1. ACCIDENT.														
In Mines and Quarries	1	...	...	...	...	...	...	...	...	1	...	...	...	...
By Vehicles { On Railways ...	6	...	...	...	...	1	1	3	1	...	...	...	...	...
	90	...	8	4	2	5	10	10	8	10	12	11	9	1
Ships, Boats, Docks (not Drowning) .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Building Operations .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Machinery	3	...	...	...	...	...	...	1	1	...	1	...	...	...
Weapons and Implements .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Burns and Scalds	26	2	3	...	2	...	...	2	5	1	3	5	2	1
Poison, Poisonous Vapours	11	...	1	...	1	...	...	1	...	2	4	2	...	...
Drowning	15	...	1	1	1	1	...	4	1	4	1	1	...	...
Suffocation	10	9	1	...	...	...	...	...	...	...	...	...	...	...
Falls	54	1	...	...	...	1	2	2	3	5	7	15	16	2
Weather Agencies .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Otherwise or not Stated	8	...	1	...	...	...	...	1	2	...	3	...	1	...
2. HOMICIDE.														
3. SUICIDE.	97	...	...	...	...	1	5	15	17	26	18	15	...	...
4. EXECUTION.														

TABLE C.—MANCHESTER, 1935.

CAUSES OF DEATHS AT DIFFERENT LIFE PERIODS—FEMALES.

Classes	CAUSES OF DEATH	All Ages Total	AGES AT DEATH—IN YEARS												
			UNDER 5 YEARS		5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards
			0 to 1	1 to 5											
	All Causes	4813	360	164	57	42	85	117	220	325	493	752	1103	874	221
A	Smallpox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Vaccinia	1	1	...	...	...	...	...	...	...	...	...	...	...	...
	Measles.....	49	9	38	2	...	...	...	...	...	...	...	...	...	...
	Scarlet Fever	3	...	2	1	...	...	...	...	...	...	...	...	...	...
	Typhus Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Whooping Cough	30	11	18	1	...	...	...	...	...	...	...	...	...	...
	Diphtheria	22	...	8	11	2	...	...	...	1	...	...	...	...	...
	Ill-defined Fever.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Enteric Fever	3	...	...	...	1	1	...	...	1	...	...	...	...	...
	Influenza	112	1	5	1	2	1	1	10	13	17	24	15	19	3
	Epidemic Diarrhoea	1	1	...	...	...	...	...	...	...	...	...	...	...	...
	Diarrhoea, Dysentery, Simple Cholera.....	30	26	4	...	...	...	...	...	...	...	...	...	...	...
	Veneral Affections.....	8	2	...	...	...	...	...	...	1	3	2	...	...	...
	Erysipelas.....	18	3	...	...	...	1	...	3	1	2	2	3	2	1
	Pyæmia, Septicæmia (Others) ...	7	1	...	...	...	...	1	...	1	...	3	1	...	...
	Puerperal Fever	24	...	...	...	...	...	1	15	8	...	...	...	...	...
	Other Zymotics	28	5	7	1	1	1	2	3	3	2	...	2	1	...
	Tubercular Periton : Tabes Mes.	7	1	...	...	...	...	...	3	2	..	1	...	...	...
	Tubercular Meningitis	24	...	8	5	3	3	1	...	2	1	1	...	...	...
	Phthisis.....	283	...	2	4	4	39	56	75	38	38	17	10	...	...
	Tuberculous Diseases (Other) ...	17	...	1	1	...	2	3	1	5	1	2	1	...	...
	Parasitic Diseases	1	1	...	...	...	...	...	...	...	...	...	...	...	...
	Alcoholism	1	...	...	...	...	...	...	...	...	1	...	...	...	...
	Rheumatic Fever	40	...	...	1	4	2	4	3	2	8	5	6	5	...
	Cancer	613	...	1	...	...	1	6	11	55	106	172	169	85	7
B and C	Premature Birth	112	112	...	...	...	...	...	...	...	...	...	...	...	...
	Congenital defects	52	44	5	2	1	...	...	...	...	...	...	...	...	...
	Atelectasis	12	12	...	...	...	...	...	...	...	...	...	...	...	...
	Epilepsy	18	1	1	...	...	...	...	2	3	4	4	1	2	...
	Convulsions	15	13	1	1	...	...	...	...	...	...	...	...	...	...
	Nervous System (Other).....	102	2	2	6	4	6	3	6	12	24	18	16	3	...
	Cerebral Hæmorrhage, Apoplexy, and Hemiplegia	238	3	...	...	...	...	...	1	5	23	43	104	49	10
	Heart and Blood Vessel Diseases	1254	1	3	1	2	3	12	16	46	115	230	404	335	86
	Pleurisy.....	5	...	1	1	1	...	...	...	...	1	1	...	...	...
	Bronchitis	199	10	5	1	...	1	...	1	6	9	26	56	64	20
	Pneumonia { Lobar-Croupous	122	6	7	1	3	5	5	14	17	17	25	17	4	1
		160	38	21	1	...	3	...	5	7	8	20	28	24	5
	"Pneumonia".....	6	1	...	1	...	...	...	...	...	...	2	1	1	...
	Respiratory Diseases (Other) ...	55	...	2	1	...	...	1	2	6	5	4	15	12	7
	Cirrhosis	4	...	...	...	...	...	...	...	1	1	1	1	...	...
	Digestive System (Other).....	155	1	7	3	3	2	4	8	18	31	27	32	18	1
	Urinary System (Other)	148	...	4	2	...	1	7	9	13	23	27	35	22	5
	Generative Organs and Childbirth	33	...	..	...	...	2	2	9	10	5	2	3	...	...
	Other specified Diseases	298	32	7	6	8	9	7	14	31	29	62	74	17	2
D	Marasmus and Atrophy.....	13	12	1	...	...	...	...	...	...	...	...	...	...	...
	Old Age	357	...	...	...	...	...	...	...	...	...	6	86	195	70
	Other Ill-defined Causes	10	2	...	...	...	...	...	...	3	1	2	1	..	1
E	Violence	88	8	3	2	3	2	1	3	6	8	15	19	16	2
	Homicide.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Suicide	35	...	..	...	...	...	...	6	8	10	8	3	..	...

TABLE D.
MANCHESTER, 1935.—CAUSES OF DEATH IN INFANCY AND
CHILDHOOD.

CAUSES OF DEATH	UNDER ONE YEAR			Total under One Year	ONE AND UNDER FIVE YEARS				Total under Five Years
	Under 3 months	3-6 months	6-12 months		1-	2-	3-	4-	
All Causes	546	114	144	804	164	67	59	48	1,142
Chicken Pox.....	...	...	...	...	...	...	...	...	...
Measles .....	...	3	13	16	51	7	10	11	95
Scarlatina .....	...	...	2	2	...	3	3	3	11
Whooping Cough	3	4	11	18	16	4	4	2	44
Diphtheria.....	...	...	...	...	4	5	5	6	20
Erysipelas	2	1	2	5	...	...	...	...	5
Diarrhoeal Diseases	38	26	13	77	8	...	...	...	85
Gastritis.....	...	...	...	...	...	...	...	...	...
Syphilis	4	1	...	5	...	...	...	...	5
Tabes Mesenterica and Tuberc. Peritonitis	...	1	...	1	1	...	1	...	3
Tubercular Meningitis .....	...	1	1	2	3	7	1	4	17
Tuberculosis (Other) .....	...	...	3	3	2	...	1	...	6
Rickets .....	...	...	2	2	8	...	...	...	10
Premature Birth	232	4	...	236	...	...	...	...	236
Injury at Birth ..	32	1	...	33	...	...	...	...	33
Atelectasis.....	23	...	..	23	...	...	..	...	23
Congenital Malformations	65	12	9	86	5	...	...	...	91
Convulsions	14	7	3	24	2	1	...	2	29
Meningitis.....	...	2	2	4	...	1	4	...	9
Nervous Diseases (Other)...	1	2	...	3	...	1	1	1	6
Bronchitis	12	2	4	18	3	2	1	1	25
Pneumonia	29	19	51	99	40	16	8	5	168
Other Respiratory Diseases	...	...	1	1	1	2	...	1	5
Atrophy, Marasmus	28	7	1	36	...	1	...	...	37
Found Dead in Bed (over- laid)	3	1	1	5	...	...	...	...	5
Suffocation	1	2	1	4	...	...	1	...	5
Violence (Other forms).....	2	1	1	4	1	4	6	3	18
Ill-defined Causes.....	...	...	...	...	...	...	...	...	...
Unclassified	57	17	23	97	19	13	13	9	151

SPECIFIED CAUSES, AND (c) INFANTILE MORTALITIES; ALSO THE PERCENTAGES TO TOTAL DEATHS OF INQUEST CASES AND OF DEATHS IN PUBLIC INSTITUTIONS; ALSO QUINQUENNIAL AVERAGES 1871-1935.

Year	Estimated Population (Mean)	Persons Married	Annual Rates per 1,000 persons living										Percentage to Total Deaths		Infantile Mortality	Year		
			Births	Deaths (all causes)	Smallpox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Typhus Fever	Enteric Fever	Simple Continued Fever	Diarrhoeal Diseases	Violence			Inquest Cases	Deaths in Public Institutions
1871-1875	477,344	24.6	38.9	28.3	0.26	0.64	1.08	0.08	0.78	0.14	0.43	0.21	1.95	0.94	7.2	13.4	198	.. 1871-1875
1876-1880	509,802	18.6	38.7	26.2	0.24	0.53	1.07	0.13	0.84	0.08	0.29	0.11	1.26	0.89	7.5	14.3	172	.. 1876-1880
1881-1885	542,746	17.9	35.1	23.6	0.04	0.71	0.48	0.10	0.68	0.05	0.20	0.03	0.99	0.72	7.0	15.9	175	.. 1881-1885
1886-1890	575,630	16.6	33.4	24.6	0.02	0.83	0.50	0.32	0.54	0.02	0.30	0.01	1.08	0.78	6.9	17.7	183	.. 1886-1890
1891-1895	517,801	16.9	33.2	23.6	0.03	0.62	0.26	0.27	0.64	0.00	0.24	0.01	1.19	0.77	7.1	19.2	186	.. 1891-1895
1896-1900	539,599	18.2	32.5	22.7	..	0.89	0.20	0.13	0.53	0.00	0.18	0.01	1.69	0.73	7.1	20.2	192	.. 1896-1900
1901-1905	554,355	17.4	30.9	20.1	0.01	0.55	0.19	0.22	0.41	0.00	0.13	0.00	1.15	0.72	7.1	24.4	173	.. 1901-1905
1906-1910	660,049	17.0	28.1	17.7	..	0.54	0.16	0.17	0.37	0.00	0.10	0.00	0.76	0.68	7.4	27.3	147	.. 1906-1910
1911-1915	731,677	17.6	24.8	16.4	..	0.50	0.12	0.14	0.25	..	0.05	..	0.84	0.67	7.9	30.8	133	.. 1911-1915
1916-1920	770,330	16.7	19.2	14.1	..	0.24	0.04	0.08	0.21	..	0.02	0.00	0.30	0.49	6.4	32.3	105	.. 1916-1920
1921-1925	751,288	16.8	20.6	13.9	..	0.25	0.06	0.10	0.20	..	0.01	..	0.33	0.44	5.7	37.8	95	.. 1921-1925
1926-1930	759,570	17.3	17.4	13.8	..	0.18	0.02	0.11	0.14	..	0.01	..	0.24	0.46	4.8	42.9	88	.. 1926-1930
1931-1935	771,182	16.8	15.0	13.1	..	0.11	0.02	0.10	0.08	..	0.00	..	0.15	0.46	5.0	48.5	77	.. 1931-1935
1931.. ..	766,378	16.2	15.9	13.9	..	0.08	0.01	0.08	0.11	..	0.01	..	0.20	0.46	4.6	46.8	84	.. .. 1931
1932.. ..	768,745	16.0	15.4	13.0	..	0.16	0.02	0.11	0.10	..	0.01	..	0.15	0.52	5.7	47.6	85	.. .. 1932
1933.. ..	771,165	16.7	14.4	13.4	..	0.06	0.02	0.11	0.06	..	0.00	..	0.13	0.46	5.0	47.8	75	.. .. 1933
1934.. ..	773,593	17.9	14.8	12.2	..	0.13	0.02	0.11	0.05	..	0.00	..	0.17	0.42	4.9	49.1	69	.. .. 1934
1935.. ..	776,028	17.2	14.5	12.9	..	0.13	0.02	0.07	0.06	..	0.00	..	0.11	0.42	4.6	51.2	71	.. .. 1935

The populations and rates prior to 1891 are those for the Unions of Manchester, Chorlton, and Prestwich, which have been taken as approximately representing "Manchester." The City was extended to include Moss Side and Withington in November, 1904, Gorton and Levenshulme in November, 1909, and Wythenshawe, April, 1931.

TABLE F.
MANCHESTER—ANNUAL RATES OF MORTALITY FROM CERTAIN CAUSES OF DEATH.

YEAR	ANNUAL RATES PER 1,000 PERSONS LIVING										RATES PER 1,00 BIRTHS	
	Cancer	Tuberc. Peritonitis Tabes Mes.	Phthisis	Other Tuberc. Diseases	Diseases of Nervous System	Diseases of Heart and Blood Vessels	Diseases of Respiratory System	Diseases of Digestive System	Diseases of Urinary System	Diseases of Generative System	Puerperal Fever	Childbirth
1881-1885 ..	0.50	0.35	2.42	0.57	3.28	1.37	5.41	1.23	0.48	0.08	3.03	1.9
1886-1890 ..	0.64	0.36	2.24	0.59	3.09	1.73	5.76	1.23	0.61	0.08	3.22	2.1
1891-1895 ..	0.62	0.22	2.09	0.75	1.74	2.53	5.56	1.07	0.52	0.07	2.75	3.4
1896-1900 ..	0.73	0.19	2.04	0.63	1.32	2.54	5.03	1.04	0.49	0.09	1.55	1.5
1901-1905 ..	0.80	0.16	1.94	0.55	1.17	2.56	4.29	0.95	0.49	0.08	1.21	1.1
1906-1910 ..	0.88	0.14	1.65	0.45	0.95	2.56	3.75	0.84	0.54	0.07	1.28	1.1
1911-1915 ..	1.01	0.12	1.59	0.38	0.79	2.34	3.45	0.68	0.56	0.09	1.24	2.1
1916-1920 ..	1.08	0.09	1.39	0.28	0.54	2.27	2.98	0.51	0.47	0.06	1.58	1.8
1921-1925 ..	1.34	0.06	1.26	0.24	0.51	2.58	3.03	0.47	0.46	0.07	1.54	2.0
1926-1930 ..	1.45	0.03	1.16	0.19	0.48	3.05	2.66	0.45	0.50	0.07	1.74	2.1
1931-1935 ..	1.61	0.02	1.00	0.13	0.41	3.68	1.95	0.46	0.48	0.05	*1.47	*2.1
1931.. ..	1.62	0.03	1.12	0.14	0.45	3.49	2.59	0.44	0.50	0.06	*1.17	*1.1
1932.. ..	1.64	0.02	1.00	0.15	0.43	3.62	1.98	0.46	0.49	0.02	1.45	2.1
1933.. ..	1.52	0.02	1.00	0.13	0.41	3.90	1.97	0.47	0.50	0.07	1.45	3.1
1934.. ..	1.60	0.02	0.97	0.14	0.37	3.77	1.47	0.45	0.47	0.06	1.25	3.1
1935.. ..	1.68	0.02	0.92	0.10	0.41	3.62	1.73	0.48	0.44	0.04	2.03	1.1

See footnotes to Table E.

* From the Year 1931 the Maternal Mortality rates are calculated on per 1,000 births (Live and Stillbirths).

TABLE G, 1935.—POPULATION, AREA, DENSITY. TOTAL BIRTHS AND DEATHS, WITH BIRTH AND DEATH RATES.

[INSTITUTION POPULATIONS, BIRTHS AND DEATHS, DISTRIBUTED.]

WARDS	Estimated Population	Area in Acres	Persons to an Acre	BIRTHS		DEATHS		Natural Rate of Increase
				Total	Rate per 1,000	Total	Rate per 1,000	
City	776,028	27,257	28	11,276	14·53	10,019	12·91	+ 1·62
All Saints	21,736	300	72	387	17·80	353	16·24	+ 1·56
Ardwick	24,119	426	57	424	17·58	378	15·67	+ 1·91
Beswick	27,067	254	107	400	14·78	348	12·86	+ 1·92
Blackley	21,144	1,158	18	266	12·58	262	12·39	+ 0·19
Bradford	27,067	790	34	406	15·00	328	12·12	+ 2·88
Cheetham	23,809	555	43	287	12·06	261	10·96	+ 1·10
Chorlton-cum-Hardy ...	47,418	1,666	28	372	7·85	486	10·25	— 2·40
Collegiate Church	16,102	446	36	264	16·40	265	16·46	— 0·06
Collyhurst	19,945	232	86	384	19·25	271	13·59	+ 5·66
Crumpsall	16,927	2,203	8	239	14·12	224	13·23	+ 0·89
Didsbury	27,915	2,354	12	324	11·61	280	10·03	+ 0·58
Exchange	301	61	5	1	3·32	3	9·97	— 6·65
Gorton North	21,293	604	35	263	12·35	257	12·07	+ 0·28
Gorton South ...	29,786	628	47	376	12·62	307	10·31	+ 2·31
Harpurhey	20,669	344	60	324	15·68	274	13·26	+ 2·42
Levenshulme	19,942	606	33	237	11·88	260	13·04	— 1·16
Longsight	23,444	593	39	245	10·45	286	12·20	— 1·75
Medlock Street	22,903	212	108	411	17·95	353	15·41	+ 2·54
Miles Platting	23,433	313	75	401	17·11	309	13·19	+ 3·92
Moston	25,936	1,231	21	396	15·27	273	10·53	+ 4·74
Moss Side East	19,249	241	80	333	17·30	292	15·17	+ 2·13
Moss Side West	19,686	267	74	251	12·75	310	15·75	— 3·00
New Cross	25,562	303	84	491	19·21	491	19·21	...
Newton Heath	20,717	1,007	21	327	15·78	322	15·54	+ 0·24
Openshaw	22,359	482	46	295	13·19	331	14·80	— 1·61
Oxford	644	167	4	7	10·87	26	40·37	— 29·50
Rusholme	22,516	806	28	224	9·95	255	11·33	— 1·38
St. Ann's	225	55	4	...	...	...	...	...
St. Clement's	6,033	181	33	106	17·57	81	13·43	+ 4·14
St. George's	25,079	266	94	446	17·79	332	13·24	+ 4·55
St John's	4,444	199	22	67	15·08	86	19·35	— 4·27
St. Luke's	26,377	316	83	466	17·67	450	17·06	+ 0·61
St. Mark's	22,170	340	65	320	14·43	312	14·07	+ 0·36
St. Michael's ..	18,486	243	76	331	17·91	295	15·96	+ 1·95
Withington	50,618	1,841	27	519	10·25	418	8·26	+ 1·99
Wythenshawe	30,907	5,567	6	686	22·20	240	7·77	+ 14·43

TABLE H, 1935.

BIRTHS REGISTERED IN THE CITY OF MANCHESTER, IN WARDS, AND DISTINGUISHING LEGITIMATE AND ILLEGITIMATE BIRTHS; ALSO THE PROPORTION OF MORTALITY AMONG INFANTS OF BOTH CLASSES UNDER ONE YEAR OF AGE.

WARDS	BIRTHS		Percentage of Illegitimate Births to Total Births	DEATHS UNDER 1 YEAR		PROPORTION OF DEATHS UNDER 1 YEAR PER 1,000 BIRTHS		
	Total	Illegitimate		Total	Of Illegitimate Children	Total	Legitimate	Illegitimate
City	11,276	507	4.5	804	59	71	69	116
All Saints	387	42	10.9	43	5	111	110	119
Ardwick	424	16	3.8	47	1	111	113	63
Beswick	400	9	2.3	34	3	85	79	333
Blackley	266	10	3.8	16	...	60	63	...
Bradford	406	13	3.2	14	...	34	36	...
Cheetham	287	13	4.5	15	2	52	47	154
Chorlton-cum-Hardy	372	19	5.1	26	3	70	65	158
Collegiate Church	264	17	6.4	22	2	83	81	118
Collyhurst	384	19	4.9	32	3	83	79	158
Crumpsall	239	12	5.0	21	5	88	70	417
Didsbury	324	7	2.2	15	1	46	44	143
Exchange	1	1	100.0	1	1	1000	...	1000
Gorton North	263	4	1.5	20	1	76	73	250
Gorton South	376	9	2.4	20	1	53	52	111
Harpurhey	324	9	2.8	20	1	62	60	111
Levenshulme	237	5	2.1	10	1	42	39	200
Longsight	245	16	6.5	15	2	61	57	125
Medlock Street	411	22	5.4	40	2	97	98	91
Miles Platting	401	17	4.2	31	2	77	76	118
Moston	396	7	1.8	24	...	61	62	...
Moss Side East	333	43	12.9	22	1	66	72	23
Moss Side West	251	21	8.4	11	2	44	39	95
New Cross	491	19	3.9	37	1	75	76	53
Newton Heath	327	7	2.1	22	1	67	66	143
Openshaw	295	11	3.7	27	2	92	88	182
Oxford	7	1	14.3	1	1	143	...	1000
Rusholme	224	16	7.1	11	...	49	53	...
St. Ann's .....	...	...	...	...	...	...	...	...
St. Clement's	106	7	6.6	8	1	75	71	143
St. George's	446	32	7.2	35	1	78	82	31
St. John's	67	2	3.0	6	...	90	92	...
St. Luke's	466	39	8.4	48	3	103	105	77
St. Mark's	320	7	2.2	16	1	50	48	143
St. Michael's	331	14	4.2	28	6	85	69	429
Withington	519	15	2.9	27	3	52	48	200
Wythenshawe	686	6	0.9	39	...	57	57	...

TABLE I, 1935.

MANCHESTER.—CERTIFICATION OF THE CAUSES OF DEATH IN THE CITY
AND IN THE VARIOUS WARDS.

WARDS	Total Deaths	Certified by		Not Certified	Proportion per cent. of Deaths		
		Registered Medical Practitioners	Inquest		Certified by		Not Certified
					Regist'd Medical Prac- titioners	Inquest	
City	10,019	9,453	454	112	94·4	4·5	1·1
All Saints	353	332	17	4	94·1	4·8	1·1
Ardwick	378	356	18	4	94·2	4·8	1·0
Beswick	348	328	17	3	94·2	4·9	0·9
Blackley	262	238	21	3	90·8	8·0	1·2
Bradford	328	313	11	4	95·4	3·4	1·2
Cheetham	261	247	11	3	94·6	4·2	1·2
Chorlton-cum-Hardy	486	456	20	10	93·8	4·1	2·1
Collegiate Church	265	249	13	3	94·0	4·9	1·1
Collyhurst	271	260	8	3	95·9	3·0	1·1
Crumpsall ..	224	217	6	1	96·9	2·7	0·4
Didsbury.....	280	267	9	4	95·4	3·2	1·4
Exchange	3	2	1	...	66·6	33·4	...
Gorton North.....	257	234	14	9	91·1	5·4	3·5
Gorton South	307	301	5	1	98·0	1·6	0·4
Harpurhey	274	258	14	2	94·2	5·1	0·7
Levenshulme	260	245	12	3	94·2	4·6	0·2
Longsight	286	262	23	1	91·6	8·0	0·4
Medlock Street	353	334	16	3	94·6	4·5	0·9
Miles Platting.....	309	295	11	3	95·5	3·6	0·9
Moston	273	259	11	3	94·9	4·0	1·1
Moss Side East	292	276	14	2	94·5	4·8	0·7
Moss Side West	310	292	13	5	94·2	4·2	1·6
New Cross	491	470	16	5	95·7	3·3	1·0
Newton Heath	322	304	17	1	94·4	5·3	0·3
Openshaw	331	312	15	4	94·3	4·5	1·2
Oxford	26	22	4	...	84·6	15·4	...
Rusholme	255	242	11	2	94·9	4·3	0·8
St. Ann's.....	...	...	...	...	...	...	...
St. Clement's	81	75	6	...	92·6	7·4	...
St. George's	332	312	19	1	94·0	5·7	0·3
St. John's	86	77	8	1	89·5	9·3	1·2
St. Luke's	450	435	10	5	96·7	2·2	1·1
St. Mark's	312	300	10	2	96·2	3·2	0·6
St. Michael's	295	272	17	6	92·2	5·8	2·0
Withington.....	418	387	22	9	92·6	5·3	2·1
Wythenshawe	240	224	14	2	93·3	5·8	0·9

NOTIFIABLE INFECTIOUS DISEASES OTHER THAN
WHOOPING COUGH AND TUBERCULOSIS.

The diseases included in the Infectious Disease (Notification) Acts, 1889 and 1899, or regulations under the Public Health Acts, are as follows:—Smallpox, Scarlet Fever, Diphtheria, Typhus Fever, Enteric or Typhoid Fever, Relapsing Fever, Continued Fever, Puerperal Fever, Puerperal Pyrexia, Erysipelas, Ophthalmia Neonatorum, Cerebro-Spinal Fever, Poliomyelitis, Polio-Encephalitis and Encephalitis-Lethargica, Malaria, Dysentery, Acute Primary Pneumonia, Acute Influenzal Pneumonia, Measles, Rubella, and Pemphigus Neonatorum. The following cases were notified in 1935, and the numbers are compared with the average of the previous ten years:—

	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	Mean	1935
Smallpox .. .. .	..	2	36	68	8	2	..	..	..	..	12	..
Scarlet Fever	2,869	2,259	1,823	2,100	2,318	3,701	2,913	2,283	1,773	2,080	2,412	2,795
Diphtheria	1,040	1,145	1,208	1,033	761	838	573	885	732	866	908	903
Typhus Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
Enteric Fever	65	30	18	32	41	33	24	39	14	14	31	20
Relapsing Fever .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	179	174	107	133	144	156	139	96	128	107	136	132
Puerperal Pyrexia .. .. .	..	32	102	66	80	88	80	76	77	119	72	122
Erysipelas	412	378	358	428	441	501	399	334	377	363	399	408
Ophthalmia Neonatorum	266	218	192	192	137	144	119	108	107	122	161	140
Cerebro-Spinal Fever	9	12	9	9	17	22	38	27	45	40	23	49
Poliomyelitis	12	12	12	8	4	3	4	5	8	14	8	7
Polio-Encephalitis	4	2	..	2	2	..	..	..	3	2	2	1
Encephalitis-Lethargica	78	91	65	50	37	23	24	9	3	6	39	4
Malaria	4	1	3	15	14	1	1	1	..	..	4	2
Dysentery	1	2	2	13	4	17	6	2	..	3	5	7
Primary Pneumonia	2,200	1,876	2,260	2,176	2,265	2,059	2,005	2,047	1,734	1,496	2,012	2,105
Influenzal Pneumonia	351	313	690	363	875	290	480	321	793	178	465	375
Measles	7,941	10,953	13,987	7,141	9,512	10,738	7,771	12,238	6,350	11,383	9,801	9,907
Rubella	2,107	1,128	407	1,498	499	237	2,553	1,687	334	342	1,079	1,180
Pemphigus Neonatorum	83	128	116	106	87	112	64	46	41	33	82	25
	17,621	18,756	21,395	15,433	17,246	18,965	17,193	20,204	12,519	17,168	17,650	18,173

In 1900 Erysipelas was made notifiable, in 1910 Ophthalmia Neonatorum, in 1912 Cerebro-Spinal Fever and Poliomyelitis, Measles and Rubella were made notifiable in 1916, and Polio-Encephalitis, Encephalitis-Lethargica, Malaria, Dysentery, Primary Pneumonia, Influenzal Pneumonia in 1919, in 1925 (September) Pemphigus Neonatorum.

Puerperal Pyrexia was made notifiable on October 1st, 1926.

The deaths from the more common diseases are shown in the following figures:—

Years	Measles	Scarlet Fever	Diphtheria	Enteric Fever	Influenza	Whooping Cough	Diarrhoea	Phthisis
1924-34 average	111	20	82	5	308	98	163	861
1935	98	15	57	4	221	46	86	711

Consultations.—Sixty-five consultation visits were made during the year by Medical Officers of the Department at the request of medical practitioners in the City in connection with the diagnosis of cases of infectious disease in which the nature of the illness was in doubt.

SMALLPOX.

No cases of smallpox occurred in the City in 1935.

SCARLET FEVER.

There were 2,795 known cases of scarlet fever in 1935. The epidemic which began towards the end of the previous year gradually declined until the autumn months, when the incidence again became excessive.

The case fatality rate was 0·61 per cent. and the type of disease continued to be mild compared with that which was prevalent in former years. The mortality rate per 1,000 of the population has remained at a constant level since 1932 and at 0·02 was the same as that for England and Wales generally.

Seventy-eight per cent. of the patients were removed to hospital, and a review of these cases is contained in a statement of the Medical Superintendent of Monsall Hospital on page 172 *et seq.* of this report.

The following figures show the course of the disease in Quarters:—

TABLE I.—SCARLET FEVER.—ATTACKS IN QUARTERS ACCORDING TO DATE OF RASH.

Year	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
1930 ..	775	738	885	1303	3701
1931 ..	889	729	612	683	2913
1932 ..	560	579	506	638	2283
1933 ..	417	454	304	598	1773
1934 ..	395	352	502	831	2080
5 years Mean	607	570	562	811	2550
1935 ..	743	590	607	855	2795

TABLE 2.—1935.—SCARLET FEVER ATTACKS IN WARDS, WITH ATTACK RATE, CASE FATALITY PER CENT., AND REMOVALS TO HOSPITAL PER CENT.

WARDS	ATTACKS	ATTACK RATE PER 1,000 LIVING	† CASE FATALITY PER CENT.	REMOVALS TO HOSPITAL PER CENT.
City	2,795	3.60	.61	77.67
All Saints	69	3.17	1.45	91.30
Ardwick	99	4.10	—	87.88
Beswick	116	4.29	—	90.52
Blackley	133	6.29	0.75	78.95
Bradford	74	2.73	—	78.38
Cheetham	83	3.49	3.61	71.08
Chorlton-cum-Hardy..	91	1.92	1.10	63.74
Collegiate Church ..	58	3.60	—	93.10
Collyhurst	87	4.36	—	85.06
Crumpsall	75	4.43	—	66.67
Didsbury	99	3.55	—	67.68
Exchange	—	—	—	—
Gorton North	87	4.09	1.15	81.61
Gorton South	150	5.04	0.67	74.00
Harpurhey	62	3.00	—	88.71
Levenshulme	63	3.16	1.59	79.37
Longsight	49	2.09	2.04	71.43
Medlock Street	43	1.88	—	88.37
Miles Platting	96	4.10	1.04	88.54
Moston	93	3.59	—	64.52
Moss Side East	66	3.43	—	89.39
Moss Side West	34	1.73	—	82.35
New Cross	105	4.11	—	81.90
Newton Heath	115	5.55	0.87	84.35
Openshaw	88	3.94	—	82.95
Oxford	3	4.66	—	100.00
Rusholme	81	3.60	1.23	76.54
St. Ann's	—	—	—	—
St. Clement's	32	5.34	—	100.00
St. George's	64	2.55	—	87.50
St. John's	7	1.58	—	85.71
St. Luke's	53	2.01	—	86.79
St. Mark's	97	4.38	1.03	86.60
St. Michael's	39	2.11	—	79.49
Withington.. .. .	206	4.07	0.49	66.99
Wythenshawe	178	5.76	1.12	47.75

† Corrected ; the fatal cases are those actually occurring amongst the cases notified.

TABLE 3.—SCARLET FEVER.—NUMBER OF ATTACKS AND OF DEATHS ; ALSO THE CASE FATALITY PER CENT. AT DIFFERENT AGES FOR THE FORTY-FOUR YEARS, 1891—1934 AND FOR 1935.

Ages	1891-1934			1935		
	Attacks	Deaths	Case Fatality per cent.	Attacks	Deaths	Case Fatality per cent.
Under 1 year	838	127	15·16	15	2	13·33
1 to 2 years	2,584	316	12·23	74	1	1·35
2 to 3 „	5,991	507	8·46	184	2	1·09
3 to 4 „	8,473	550	6·49	215	3	1·39
4 to 5 „	9,935	472	4·75	267	3	1·12
5 to 6 „	11,297	302	2·67	338	2	0·59
6 to 7 „	10,331	209	2·02	258	2	0·78
7 to 8 „	9,235	143	1·55	224	—	—
8 to 9 „	7,689	98	1·27	168	—	—
9 to 10 „	6,410	84	1·31	169	—	—
10 to 15 „	18,879	182	0·96	538	—	—
15 to 20 „	5,856	71	1·21	119	1	0·84
20 to 25 „	2,879	43	1·49	65	—	—
25 to 35 „	2,742	50	1·82	102	1	0·98
35 to 45 „	886	21	2·37	45	—	—
45 and over	247	7	2·83	14	—	—
All ages	104,272	3,182	3·05	2,795	17	0·61

TABLE 4.—SCARLET FEVER MORTALITY, 1935.—RATE PER 1,000 LIVING, COMPARED WITH MEAN OF FIVE YEARS.

	1930	1931	1932	1933	1934	Mean	1935
England and Wales	0·02	0·01	0·01	0·02	0·02	0·02	0·01
121 Great Towns	0·02	0·01	0·01	0·02	0·02	0·02	0·01
London	0·02	0·02	0·02	0·02	0·02	0·02	0·01
Manchester City	0·02	0·01	0·02	0·02	0·02	0·02	0·02
140 Smaller Towns	0·01	0·01	0·01	0·02	0·02	0·01	0·01

SCARLET FEVER, 1935.—ATTACKS IN WEEKS, ACCORDING TO DATE OF RASH.

FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
Week of Year	1935	Week of Year	1935	Week of Year	1935	Week of Year	1935
1	44	14	41	27	52	40	72
2	57	15	49	28	39	41	81
3	74	16	48	29	50	42	71
4	64	17	39	30	37	43	86
5	57	18	49	31	45	44	82
6	62	19	57	32	41	45	61
7	46	20	42	33	26	46	68
8	48	21	52	34	32	47	64
9	67	22	42	35	44	48	55
10	55	23	48	36	42	49	55
11	60	24	29	37	54	50	46
12	61	25	53	38	74	51	68
13	54	26	42	39	59	52	51
Total ..	749	Total ..	591	Total ..	595	Total ..	860

City total, 1935—2,795.

SCARLET FEVER “RETURN” CASES, 1935.

Out of 2,336 discharges from Monsall Hospital, 79 gave rise to at least 90 “return” cases, a “return” case rate per cent. of 3·9. In addition, 7 others contracted the disease indirectly from a returned patient.

Table showing the interval between return home of hospital patients and onset of illness in “return” cases.

Days					0-6	7-13	14-20	21-27
No. of Cases	..	..	..	..	26	42	16	6

DIPHTHERIA.

The following figures show the number of cases notified and accepted as diphtheria each year for the last ten years:—

1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
1,145	1,208	1,033	761	838	573	885	732	866	903

“CARRIERS” AND THE VIRULENCE TEST.

A diphtheria “carrier” is a person who, although apparently in good health, yet harbours in the throat or nose organisms indistinguishable from those of diphtheria. Not all diphtheria-like organisms are capable of provoking disease and a virulence test is made to determine which are capable of so doing and which are not.

The value of the test is that, in cases where the result is negative, isolation of the individual is unnecessary.

Of the total number of formal notifications received it was found on investigation that 175 related to persons who were merely “carriers” of diphtheria-like organisms. In addition, a further 35 “carriers” were discovered who were not notified as suffering from diphtheria.

In many instances it is not possible to isolate the diphtheria bacilli in pure culture and in such cases a virulence test cannot be carried out.

The following table relates to 131 “carriers” in which a virulence test was made and is of interest in showing the types of “carriers” and the number who were capable of spreading infection.

In the figures here presented clinical cases of diphtheria are excluded, but cases of children with non-membranous rhinitis unaccompanied by constitutional symptoms are included.

DIPHTHERIA “CARRIERS” AND VIRULENCE TESTS, 1935.

Type	No. of “Carriers”	No. Virulent	No. Non-virulent	Per cent. Virulent
Nose	102	55	47	53·9
Throat	26	21	5	80·8
Nose and Throat	3	2	1	66·7
Total	131	78	53	59·5

MORTALITY.

The case fatality rate in 1935 was 6·64 per cent. compared with an average of 9·42 in the five previous years. In the interpretation of these figures it must be borne in mind that only clinical cases of diphtheria are included in the calculation. The death rate per 1,000 of the population in Manchester was 0·07 compared with 0·08 in the country as a whole.

The mortality from diphtheria, apart from artificial active immunisation, can be combated only by prompt and intensive treatment with antitoxin. The difficulty in this regard becomes evident when it is known that in the fatal cases which occurred in 1935 only 8 per cent. received treatment by antitoxin within two days of the onset of the illness. Such delay is disastrous. It is due in part to the hesitancy of the parent in seeking medical advice and in part to the difficulties of early diagnosis which confront the medical attendant.

Swabs.

A total of 2,522 swabs were submitted to the Public Health Laboratory by medical practitioners during the year and, of these, 156 or 6·2 per cent. proved positive. So far as was practicable swabs were taken from the throats and noses of all members under 14 years of age of each family where there had occurred a case of diphtheria.

SUPPLY OF ANTITOXIN.

Diphtheria antitoxin, in phials containing 8,000 units, is supplied free of charge to all medical practitioners for the treatment of persons residing temporarily or permanently in the City, and it may be obtained from the Public Health Office during office hours or at any time from the following fire stations:—Ash Street, Harpurhey; New Street, Miles Platting; Pollard Street, Ancoats; Upton Street, Chorlton-upon-Medlock. It may also be obtained at any time from all of the district police stations. The total quantity supplied in this manner in 1935 was 815 phials (6,520,000 units), at a cost of £261 9s. 7d.

TABLE II.

DIPHTHERIA, 1935—ATTACKS IN WEEKS, ACCORDING TO DATE OF ONSET.

FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
Week of Year	1935	Week of Year	1935	Week of Year	1935	Week of Year	1935
1	13	14	12	27	11	40	14
2	21	15	16	28	11	41	10
3	45	16	15	29	10	42	11
4	32	17	12	30	17	43	13
5	33	18	11	31	10	44	12
6	25	19	20	32	16	45	10
7	32	20	30	33	13	46	18
8	33	21	18	34	14	47	28
9	17	22	15	35	21	48	19
10	18	23	16	36	12	49	19
11	13	24	11	37	21	50	14
12	18	25	9	38	16	51	16
13	18	26	18	39	15	52	11
Total ..	318	Total ..	203	Total ..	187	Total ..	195

CITY TOTAL, 1935—903.

The following table shows that the number of attacks is highest in children up to 10 years.

TABLE III.

DIPHTHERIA.—NUMBER OF ATTACKS, OF DEATHS, AND CASE FATALITY AT DIFFERENT AGES FOR THE FORTY-FOUR YEARS, 1891-1934, AND FOR 1935.

Ages	1891-1934			1935		
	Attacks	Deaths	*Case Fatality %	Attacks	Deaths	*Case Fatality %
Under 1 year	563	298	52·93	5	1	20·00
1 to 2 years.. ..	1416	616	43·50	18	4	22·22
2 to 3 "	2046	580	28·35	35	4	10·53
3 to 4 "	2572	555	21·58	41	5	12·20
4 to 5 "	2825	525	18·58	78	7	8·97
5 to 6 "	2959	441	14·90	112	10	8·93
6 to 7 "	2478	282	11·38	85	8	9·41
7 to 8 "	1938	204	10·53	64	6	9·38
8 to 9 "	1573	165	10·49	62	2	3·23
9 to 10 "	1186	101	8·52	52	3	5·77
10 to 15 "	3467	164	4·73	221	9	4·07
15 to 20 "	1334	47	3·52	51	—	—
20 to 25 "	856	23	2·69	31	—	—
25 to 35 "	1024	26	2·54	25	—	—
35 to 45 "	437	9	2·06	14	1	7·14
45 and over	226	24	10·62	6	—	—
All ages	26900	4060	15·09	903	60	6·64

* The percentages in this column are the actual proportions of fatal cases to the attacks at those ages.

The case mortality rate at all ages since 1916 has been as follows:—

1916	1917	1918	1919	1920	1921	1922	1923	1924	1925
—	—	—	—	—	—	—	—	—	—
11·7	10·8	10·8	9·1	7·3	8·7	9·8	9·5	9·3	8·8
1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
—	—	—	—	—	—	—	—	—	—
8·6	8·3	8·1	7·8	6·4	10·1	9·3	11·7	9·58	6·64

TABLE IV.

DIPHTHERIA, 1935.—ATTACKS IN WARDS, WITH ATTACK RATE, CASE FATALITY PER CENT., AND REMOVALS TO HOSPITAL PER CENT

Wards				Attacks	Deaths	Attack Rate per 1000 Living	† Case Fatality per cent.	Removals to Hospital per cent.
City	..	..	..	903	60	1·16	6·64	90·03
All Saints	27	2	1·24	7·41	88·89			
Ardwick	21	4	0·87	19·05	95·24			
Beswick	20	4	0·74	20·00	90·00			
Blackley	33	2	1·56	6·06	90·91			
Bradford	17	1	0·63	5·88	88·24			
Cheetham	31	—	1·30	—	93·55			
Chorlton-cum-Hardy ..	18	2	0·38	11·11	72·22			
Collegiate Church ..	44	4	2·73	9·09	95·45			
Collyhurst	36	3	1·80	8·33	94·44			
Crumpsall	23	1	1·36	4·35	91·30			
Didsbury	17	—	0·61	—	47·06			
Exchange	—	—	—	—	—			
Gorton North	20	—	0·94	—	100·00			
Gorton South	23	2	0·77	8·70	86·96			
Harpurhey	37	1	1·79	2·70	94·60			
Levenshulme	52	5	2·61	9·62	82·69			
Longsight	20	1	0·85	5·00	90·00			
Medlock Street	14	2	0·61	14·29	100·00			
Miles Platting	28	3	1·10	10·71	96·43			
Moston	25	—	0·96	—	92·00			
Moss Side East	29	—	1·51	—	89·66			
Moss Side West	18	2	0·91	11·11	83·33			
New Cross	42	1	1·64	2·38	90·48			
Newton Heath	48	5	2·32	10·42	95·83			
Openshaw	13	—	0·58	—	84·62			
Oxford	1	—	1·55	—	100·00			
Rusholme	18	3	0·80	16·67	100·00			
St. Ann's	—	—	—	—	—			
St. Clement's	28	4	4·64	14·29	75·00			
St. George's	22	—	0·88	—	100·00			
St. John's	6	—	1·35	—	100·00			
St. Luke's	21	—	0·83	—	90·48			
St. Mark's	43	4	1·94	9·30	88·37			
St. Michael's	38	—	2·06	—	97·37			
Withington	39	4	0·77	10·25	84·62			
Wythenshawe	31	—	1·00	—	90·32			

† Corrected; the fatal cases are those actually occurring amongst the cases notified.

TABLE V.

DIPHTHERIA MORTALITY, 1935.—RATE PER 1,000 LIVING COMPARED
WITH MEAN OF FIVE YEARS.

	1930	1931	1932	1933	1934	Mean	1935
England and Wales	0·09	0·07	0·06	0·06	0·10	0·08	0·08
121 Great Towns	0·10	0·08	0·07	0·08	0·11	0·09	0·09
London	0·10	0·06	0·07	0·08	0·11	0·08	0·06
Manchester City	0·07	0·08	0·11	0·11	0·11	0·10	0·07
140 Smaller Towns.....	0·07	0·05	0·03	0·04	0·09	0·06	0·07

THE PREVENTION OF DIPHTHERIA.

The number of persons immunised against diphtheria each year continues to increase. During 1935, 17,939 persons were immunised or found to be naturally immune, and 1,489 were partially immunised against the disease.

It is gratifying to note an increase in the number of children under 5 years of age who have received this treatment, but the number is as yet too small to affect the aggregate incidence of the disease in the community.

The following table illustrates the progress of the scheme since its inception :—

NUMBER OF PERSONS, IN AGE GROUPS, COMPLETELY IMMUNISED OR FOUND TO BE SCHICK NEGATIVE.

	1927	1928	1929	1930	1931	1932	1933	1934	1935
Under 1 year .. ..	..	20	162	248	212	598	595	691	963
1 year	3	50	269	313	331	813	743	805	1,219
2 years	5	54	226	197	254	579	613	788	1,033
3	8	44	221	245	206	482	733	668	1,146
4	16	34	238	205	210	458	744	664	1,333
5	9	40	270	160	208	473	921	997	1,256
6	19	35	285	128	186	406	1,015	987	1,408
7	22	20	295	106	138	367	1,002	1,078	1,324
8	12	24	282	88	138	337	876	1,415	1,360
9	5	25	238	66	116	289	852	1,313	1,320
10	3	11	88	62	105	234	711	1,377	1,188
11	6	17	59	46	66	248	486	1,070	1,007
12	3	14	49	29	38	272	347	636	873
13	5	10	26	27	34	122	283	443	880
14	4	1	6	19	25	61	78	261	196
15 years and over ..	2	10	53	57	77	141	165	595	1,433
Total	122	409	2,767	1,996	2,344	5,880	10,164	13,788	17,939
Total under 5 years at the end of 1935 12,220									
Total 5-9 years 22,044									
Total 10-14 years 16,561									
Total over 15 years 4,584									

Total 1927-1935 55,409

The totals at the end of 1935 indicate only approximately the immune population since no account is taken of any deaths that may have ensued subsequently.

Immunisation is carried out in the schools by part-time medical practitioners specially appointed for the work, at the maternity and child welfare centres and public health office, at the hospitals, and by general practitioners in their private practice.

TABLE B.
NUMBER OF PERSONS DEALT WITH IN MANCHESTER IN 1935.

	Number completely immunised or found to be Schick Negative	Number partially immunised
Schools	10,466	1,041
Child Welfare Centres	2,956	53
Hospitals	3,319	362
Public Health Office	570	31
General Practitioners	448	2
Totals	17,759	1,489

3,512 primary Schick tests were performed with the result that 1,692 were positive, 1,727 negative, 85 pseudo and positive, and 8 pseudo and negative.

The majority of persons have been immunised by means of three 1 cc. injections of T.A.M. During the latter half of the year T.A.F. was substituted for T.A.M. for those of ten years of age and over. The number of local reactions encountered has in consequence considerably decreased, with the result that many more now complete the full course of injections. Alum precipitated toxoid has been found useful in isolation hospitals and in children's hospitals where the high and rapid immunity it confers is of value in the prevention of cross infection. But it is open to doubt whether the immunity conferred by a single injection of this prophylactic is of a sufficiently lasting nature to make it of equal value in community immunisation. A number of children under the age of eight years have been treated by the two-injection method, using 0.1 cc. and 0.3 cc. of A.P.T. at an interval of two weeks. There have been no local reactions and as judged by subsequent Schick tests the results appear to be satisfactory. It is proposed to adopt this method for these younger children in the hope that more parents will avail themselves of the opportunity to have their children immunised and allow them to complete the course.

* ENTERIC FEVER.

Twenty-five notifications of enteric fever were received in 1935, five of which related to cases in which the diagnosis was subsequently altered. Thus, 20 persons contracted enteric fever, and of these 15 were infected by *B. typhosus* and five by *B. paratyphosus* B. Three of the cases proved fatal. It is of interest to note that one of the patients was a child of ten months, who suffered from paratyphoid B. in the month of August. The blood serum agglutinated the bacilli in a dilution of 1 in 3,000, and the specific organisms were isolated from the stools. There was no other illness in the family and it was found impossible to elicit how the child became infected.

Sources of Infection.

Cases were widespread, both in place and time, and no connection was traced between them. There was no suspicion attached to the consumption of shell-fish nor was there any association with common articles of diet such as milk, ice-cream, fried fish, etc. In spite of intensive investigations the source of infection in all the cases remained obscure.

Examination of Blood Specimens.

155 specimens of blood were submitted to the laboratory by medical practitioners in connection with cases of illness suspected to be enteric fever, and 6 gave positive Widal reactions. In addition, 42 specimens which were obtained from members of infected households, with a view to discovering overlooked cases or "carriers" were examined, with negative results.

"Carriers."

Two patients treated in Monsall Hospital for typhoid continued to excrete typhoid organisms for an unduly long period after recovery, and as the home conditions were unsuitable they had to be retained in the hospital until they were clear. M. 23 years, was admitted on August 18th and discharged on the following January 14th. M. 14 years, admitted on September 7th was discharged on January 15th.

L.B., F. 35, who had been under observation since February, 1935, was declared to be clear in September of that year.

M.C., F. 54, who is engaged in house duties, had typhoid in October, 1933, and was still excreting organisms of the disease in February, 1934, since which time she has refused to allow specimens to be taken for examination.

A.S., F. 37, who is also engaged in house duties, was infected in April, 1932, with paratyphoid B. and she continues to harbour the organisms in her body.

Instructions are given to these persons as to the precautions they must take. They have themselves remained in apparent good health and so far as is known have not been responsible for any spread of infection.

Table I. shows the attack and death-rates compared with those for England and Wales since 1912.

TABLE I.

INCIDENCE OF AND DEATH-RATE FROM ENTERIC FEVER IN MANCHESTER.
Number of Notified Cases, Deaths, and Death-rates per 1,000 living from Enteric Fever in each of Twenty-four successive Years.

YEAR	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
No. of cases notified and accepted ...	242	292	156	174	78	86	68	90	54	74	36	50
No. of deaths.	43	47	34	46	22	10	10	19	13	12	4	8
Death - rate — Manchester	0·06	0·06	0·05	0·06	0·03	0·01	0·01	0·02	0·02	0·02	0·01	0·01
Death - rate — England and Wales..	0·04	0·04	0·05	0·04	0·03	0·03	0·03	0·01	0·01	0·02	0·01	0·01

YEAR	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
No. of cases notified and accepted . .	103	65	30	18	32	41	30	22	39	14	14	20
No. of deaths	14	8	9	1	4	7	4	4	3	3	—	3
Death-rate — Manchester	0·02	0·01	0·01	0·00	0·01	0·01	0·01	0·01	0·01	0·00	0·00	0·00
Death-rate — England and Wales..	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·01	0·00	0·00

* Including typhoid and paratyphoid.

Table II. shows at what ages enteric fever appears to be most prevalent and also at what ages it is most fatal.

TABLE II.

ENTERIC FEVER.—NUMBER OF ATTACKS, OF DEATHS, AND CASE FATALITY PER CENT. AT DIFFERENT AGES FOR THE FORTY-FIVE YEARS, 1891—1935.

Ages	1891-1935		
	Attacks	Deaths	Case Fatality Per cent.
Under 1 year	21	9	42·9
1 to 2 years	58	8	13·8
2 „ 3 „	122	17	13·9
3 „ 4 „	175	22	12·6
4 „ 5 „	232	25	10·8
5 „ 6 „	265	28	10·6
6 „ 7 „	266	26	9·8
7 „ 8 „	247	20	8·1
8 „ 9 „	265	22	8·3
9 „ 10 „	261	26	10·0
10 „ 15 „	1,508	163	10·8
15 „ 20 „	1,648	297	18·0
20 „ 25 „	1,599	313	19·6
25 „ 35 „	2,364	541	22·9
35 „ 45 „	1,165	338	29·0
45 and over	814	271	33·3
All ages	11,010	2,126	19·3

TABLE III.

ENTERIC FEVER ATTACKS IN WEEKS REPORTED IN 1935 ACCORDING TO DATE OF ONSET.

FIRST QUARTER		SECOND QUARTER		THIRD QUARTER		FOURTH QUARTER	
Week of Year	1935	Week of Year	1935	Week of Year	1935	Week of Year	1935
I	I	14	—	27	I	40	—
2	—	15	I	28	—	41	—
3	I	16	—	29	—	42	I
4	—	17	I	30	2	43	I
5	—	18	—	31	—	44	I
6	—	19	—	32	I	45	—
7	2	20	—	33	I	46	—
8	I	21	—	34	I	47	—
9	—	22	I	35	—	48	I
10	I	23	I	36	—	49	—
11	—	24	—	37	—	50	—
12	—	25	—	38	—	51	—
13	—	26	—	39	—	52	—
						53	—
Total ..	6	Total ..	4	Total ..	6	Total ..	4

City total, 1935 = 20.

TABLE IV.

ENTERIC FEVER MORTALITY, 1935—RATE PER 1,000 LIVING, COMPARED WITH MEAN OF FIVE YEARS.

	1930	1931	1932	1933	1934	Mean	1935
England and Wales	0·01	0·01	0·01	0·01	0·00	0·01	0·00
London	0·01	0·01	0·00	0·00	0·00	0·00	0·00
CITY OF MANCHESTER ..	0·01	0·01	0·01	0·00	0·00	0·01	0·00

UNDULANT FEVER.

All blood specimens submitted to the Public Health Laboratory for Widal tests are examined for agglutination with Br. Abortus, the organism responsible for the occurrence of undulant fever in man.

In August, 1935, a van driver aged 29 years began to be ill and the course of his illness was suggestive of undulant fever. His blood serum agglutinated Br. Abortus in 1 in 2,560 dilution which would seem to confirm the diagnosis. Samples of the milk regularly supplied to the household and also from a farm at which the patient obtained and drank milk while on holiday prior to his illness were examined bacteriologically, with negative results so far as Br. Abortus was concerned, and the origin of the illness remains obscure.

In September, 1935, a warehouse clerk aged 37 years became ill with symptoms of undulant fever and his blood serum agglutinated Br. Abortus in 1 in 2,560 dilution. The patient was in the habit of drinking daily unpasteurised milk from three different sources. Two of these milks on examination showed standard agglutination in 1 in 40 and 1 in 160 dilutions respectively. In neither case was the organism recovered from the test animals employed. Although, therefore, these findings are suspicious they do not warrant a definite conclusion as to the source of infection.

CEREBRO-SPINAL FEVER.

Forty-nine cases of cerebro-spinal fever were notified and accepted as such in 1935, the diagnosis being confirmed bacteriologically in 32 of them. The cases were widely spread over the city and no particular focus of infection was evident.

There were 26 deaths from this disease, giving a case mortality rate of 53·1 per cent., which compares with a rate of 57·5 per cent. in 1934.

As regards seasonal prevalence, 18 cases occurred in the first quarter of the year, 15 in the second, 8 in the third, and 8 in the last quarter.

Except in 10 instances all the patients were removed to Monsall Hospital and treatment by serum injected intrathecally was commenced at the earliest opportunity. There is evidence which shows the value of this treatment, especially when it can be given in the early stages of the illness. Further reference is made to the results obtainable by serum treatment in the section of this report dealing with Monsall Hospital on pages 181 to 182.

CASES OF CEREBRO-SPINAL FEVER IN AGE GROUPS AND SEXES, 1935.

Age Groups	No. Cases Males	No. Cases Females	Total
0— 5 years	8	11	19
5—10 „	6	3	9
15—15 „	6	4	10
10—20 „	4	1	5
20—25 „	1	—	1
25—35 „	1	3	4
35 and over	1	—	1
All Ages	27	22	49

POLIOMYELITIS.

Particulars of notified cases of poliomyelitis for 1935 are given in the following table :—

Case	Sex	Age	Ward	Onset	Notified	Paralysis	Result—Jan., 1936
		Years					
1	F	2	New Cross	Feb. 21	March 18	Right arm and leg	Died March 25th
2	M	14	Chorlton- cum-Hardy	July 12	July 26	Right leg	Having massage treatment
3	M	11	Wythenshawe	Aug. 10	Aug. 15	Spine	Paralysis right leg
4	M	16	Bradford	Sept. 12	Sept. 24	Legs and left arm	Improving
5	M	9	Newton Heath	Sept. 25	Oct. 16	Left arm	Improving
6	F	7½	St. Luke's ..	Nov. 12	Nov. 27	Legs.. ..	Having massage treatment
7	M	17½	Wythenshawe	Nov. 16	Dec. 10	Legs.. ..	Improving

ENCEPHALITIS LETHARGICA.

Three notifications of encephalitis lethargica were received and accepted in 1935, but in only one instance was the onset of illness in that year.

One of the notified cases proved fatal. In addition, 10 deaths were registered in which chronic encephalitis lethargica was declared to be a contributory cause. These cases had not previously been notified.

Table I. shows the fate of patients who were notified to be suffering from this disease between the years 1919 to 1935. From the table it may be calculated that during the last 17 years notifications were received in regard to 737 persons. 337, or 45·7 per cent., have died ; 102, or 13·8 per cent., have apparently recovered ; 260, or 35·3 per cent., remain alive but are either partially or wholly disabled ; and 38, or 5·1 per cent., are untraceable.

TABLE I.

FATE OF ENCEPHALITIS LETHARGICA PATIENTS, 1919-1935.
Patients under 16 years at time of notification.

Years	Total No. of cases notified	A		B		No. in whom changes of character have occurred	No. (among B) in whom Parkinson- ism has supervened	C				D
		No. known to be alive and well	No. suffering from sequelæ	No. of Patients known to have died				No. of Patients untraced				
				Interfering with normal schooling or occupation	Preventing normal schooling or occupation				0-1 months after onset	2-6 months months	7-12 months		Over 1 year after onset
1919-23	41	7	7	2	4	5	17	3	1	4	—	
1924-28	157	33	32	27	18	20	35	7	—	17	6	
1929-33	17	4	—	5	—	—	6	—	1	—	1	
1934 ..	—	—	—	—	—	—	—	—	—	—	—	
1935 ..	1	—	—	1	—	—	—	—	—	—	—	
Total	216	44	39	35	22	25	58	10	2	21	7	

Patients 16 years and over when notified.

1919-23	64	9	12	4	4	10	20	10	3	5	1
1924-28	371	46	51	84	5	65	51	31	9	72	27
1929-33	78	3	10	20	0	8	14	6	3	19	3
1934 ..	6	—	4	—	—	—	2	—	—	—	—
1935 ..	2	—	—	1	—	—	1	—	—	—	—
Total	521	58	77	109	9	83	88	47	15	96	31

**BACTERIOLOGICAL EXAMINATIONS MADE FOR THE
COUNTY BOROUGH OF MANCHESTER DURING
THE YEAR 1935, PUBLIC HEALTH LABORATORY,
UNIVERSITY OF MANCHESTER.**

Month	Diphtheria		Typhoid	Tuberculosis				Water	
				Sputum		Milk		Bacterio- logical	Chemical
	Total	+	Total	Total	+	Total	+	Total	Total
January	1263	147	17	175	21	140	16	22	22
February	1146	114	10	198	26	108	13	4	3
March	993	93	11	179	19	108	3	11	11
April.. ..	656	69	12	182	23	163	12	14	14
May	839	88	8	187	25	181	22	6	6
June	490	45	11	127	20	90	8	14	15
July	631	50	17	140	22	199	22	17	17
August	568	63	22	128	25	132	13	12	12
September	836	96	18	113	16	139	18	11	11
October	812	54	9	155	23	134	14	19	19
November	766	88	13	129	8	137	20	7	7
December	721	71	10	114	19	185	21	6	6
Total	9721	978	158	1827	247	1716	182	143	143

Total specimens enumerated above 13708.

Other investigations 1314 as under :—

Milks—Coli, etc.	718
„ Chemical examinations	123
„ For Abortus	5
„ Microscopical for tubercle bacilli	3
Diphtheria, virulence tests	285
Swabs—Vincent's angina	6
„ Naso-pharyngeal.. ..	1
Swabs, cultivation, hæmolytic, streptococci, etc.	73
Fluids, etc., for tubercle bacilli	17
Blood, animal parasites in	12
Urine and fæces, for typhoid group	55
Cerebro-spinal fluid, and swabs, meningitis	2
Foods, for pathogenic organisms	7
Foods, etc., chemical examination for metals	5
Maternity outfit	1
Glands of cow	1

1,314

MEASLES AND GERMAN MEASLES.

Cases notified	1935				
	1st quarter	2nd quarter	3rd quarter	4th quarter	Total
MEASLES—					
By Doctors	155	702	1,131	5,988	7,976
„ Others	24	129	284	1,494	1,931
Total	179	831	1,415	7,482	9,907
GERMAN MEASLES—					
By Doctors	170	490	269	94	1,023
„ Others	25	70	54	8	157
Total	195	560	323	102	1,180

The deaths from measles in successive years are shown in the following table :—

TABLE I.

DEATHS FROM MEASLES IN THE CITY OF MANCHESTER DURING THE
TEN YEARS, 1926-1935.

Under One Year				Years of Age				5 Years and upwards	Total deaths at all ages
Years	Under 3 Months	3-5 Months	6-11 Months	1-	2-	3-	4-		
1926	1	2	29	80	26	9	4	5	156
1927	1	5	39	65	23	14	9	8	164
1928	1	5	41	43	22	4	5	2	123
1929	0	1	17	28	4	6	2	2	60
1930	1	6	32	61	20	13	6	7	146
1931	2	5	4	28	11	8	2	5	65
1932	0	2	24	55	14	11	5	11	122
1933	0	0	7	23	4	4	5	5	48
1934	1	4	13	40	12	7	11	9	97
1935	0	3	13	51	7	10	11	3	98

TABLE 2.
INCIDENCE OF MEASLES IN MANCHESTER DURING THE YEAR 1935
ACCORDING TO AGE GROUPS.

Disease	Under 5 years	5 years and over	Total
Measles	6,620	3,287	9,907

TABLE 3.—MEASLES, DEATHS IN QUARTERS.

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Whole Year
1901-1910 (mean)..	80	122	68	59	329
1911-1920 (mean)..	87	125	33	32	277
1921-1930 (mean)..	51	62	26	30	159
1931	3	9	3	50	65
1932	89	30	1	2	122
1933	1	2	6	39	48
1934	88	7	1	1	97
1935	1	2	5	90	98

TABLE 4.—MEASLES MORTALITY RATES.—RATE PER 1,000 LIVING,
COMPARED WITH MEAN OF FIVE YEARS.

	1930	1931	1932	1933	1934	Mean 5 years	1935
England and Wales	0·10	0·06	0·08	0·05	0·09	0·08	0·03
121 Great Towns	0·15	0·07	0·11	0·06	0·12	0·10	0·04
London	0·23	0·07	0·19	0·02	0·20	0·14	0·00
CITY OF MANCHESTER ..	0·23	0·08	0·16	0·06	0·13	0·13	0·13
140 Smaller Towns.....	0·08	0·05	0·06	0·04	0·07	0·06	0·03

WHOOPING COUGH.

The cases of this disease notified are obtained entirely through the schools and the same disabilities attach to this mode of notification as were experienced in measles. Notwithstanding, these notifications are useful. The cases are visited and dealt with by the Health Visitors in the same manner as cases of measles.

Whooping cough notifications during 1935 :—

	First quarter	Second quarter	Third quarter	Fourth quarter	Total
1935	308	622	441	261	1,632

TABLE I.

WHOOPING COUGH MORTALITY.—RATE PER 1,000 LIVING, COMPARED WITH MEAN OF FIVE YEARS.

	1930	1931	1932	1933	1934	Mean 5 years	1935
England and Wales	0·05	0·06	0·07	0·05	0·05	0·06	0·04
121 Great Towns	0·05	0·07	0·08	0·06	0·06	0·06	0·04
London	0·03	0·07	0·08	0·08	0·07	0·07	0·04
CITY OF MANCHESTER	0·05	0·11	0·10	0·06	0·05	0·07	0·06
140 Smaller Towns.....	0·05	0·05	0·06	0·04	0·02	0·04	0·03

TABLE 2.—WHOOPING COUGH, DEATHS IN QUARTERS.

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Whole Year
1911–1920 (Mean)	59	73	24	17	173
1921–1930 (Mean)	48	52	15	15	130
1931	31	15	18	22	86
1932	39	27	7	7	80
1933	16	14	8	9	47
1934	14	12	6	3	35
1935	6	18	14	8	46

TABLE 3.
INCIDENCE OF WHOOPING COUGH (KNOWN CASES) IN MANCHESTER DURING
THE YEAR 1935 ACCORDING TO AGE GROUPS.

Disease	Under 5 years	5 years and over	Total
Whooping Cough	1,246	386	1,632

A COMPARISON OF MORTALITY FROM SCARLET FEVER, DIPHTHERIA,
MEASLES, AND WHOOPING COUGH.

YEAR	WHOOPING COUGH		MEASLES		SCARLET FEVER		DIPHTHERIA	
	Known Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1926	2,094	61	10,953	156	2,259	25	1,145	103
1927	2,244	124	13,987	164	1,823	20	1,208	91
1928	3,189	89	7,141	123	2,100	14	1,033	99
1929	4,037	220	9,512	60	2,318	11	761	57
1930	1,388	37	10,738	146	3,701	16	838	58
1931	3,150	86	7,771	65	2,913	8	573	60
1932	2,280	80	12,238	122	2,283	17	885	82
1933	2,230	47	6,350	48	1,773	18	732	86
1934	1,565	35	11,383	97	2,080	14	866	84
1935	1,632	46	9,907	98	2,795	15	903	57
Total	23,809 *	825	99,980	1,079	24,045	158	8,944	777
Manchester— Case fatality rate per cent.	3·5		1·1		0·7		8·4	

* It should be pointed out that the estimated number of cases (23,809) occurring during the 10 years does not represent all the actual cases. Since this disease is not notifiable by medical practitioners, many cases escape our notice.

DIARRHŒA.

TABLE 1.—1935.—DIARRHŒA AND SIMPLE CHOLERA MORTALITY :
DEATHS UNDER TWO YEARS OF AGE PER 1,000 BIRTHS,
COMPARED WITH THE MEAN OF FIVE YEARS.

	1930	1931	1932	1933	1934	Mean 5 years	1935
England and Wales	6.0	6.0	6.6	7.1	5.5	6.2	5.7
121 Great Towns	8.3	8.4	8.9	9.4	7.4	8.5	7.9
London	9.9	9.7	12.6	11.6	12.6	11.3	1.2
CITY OF MANCHESTER	11.5	12.0	8.6	8.6	11.2	7.5	7.5
140 Smaller Towns	4.4	4.0	4.5	4.9	3.6	4.3	3.8

The number of deaths in successive years, and their distribution in quarters of the year, are exhibited in the following figures :—

TABLE 2.—DIARRHŒA AND SIMPLE CHOLERA DEATHS IN QUARTERS,
1926–1935.

	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
First Quarter . . .	41	32	44	38	46	55	32	28	29	18
Second Quarter . .	43	34	48	45	39	34	33	30	41	25
Third Quarter . . .	60	49	42	38	26	28	27	17	29	23
Fourth Quarter . .	93	36	64	58	42	31	24	21	29	19
	237	151	198	179	153	148	116	96	128	85

DYSENTERY.

Eight cases of dysentery came to the notice of the department during the year. Three patients died.

The 6 cases of dysentery and 5 carriers which are known to the Department have been visited each six months. The investigation of the health of the members of the patients' families revealed no suspicious symptoms.

MALARIA.

Two cases of malaria were notified in 1935.

ANTHRAX.

No cases of anthrax were notified during the year 1935.

FOOD POISONING.

Outbreak due to Milk.

In January, 131 children attending an elementary school absented themselves on one day on account of sickness. The symptoms consisted of vomiting only, and all the children recovered in the course of two days. Investigation indicated that the milk supply was probably at fault, and the sickness began some seven hours after drinking milk at the school.

Out of 790 children 506 were receiving a third of a pint of milk daily, and of these 131, or 26 per cent., were taken ill. No child who was not having milk was affected.

No sample of the milk used on that particular day at the school was available, but other samples from the dairy were examined and found to contain no harmful ingredients.

If the milk was the cause of the illness it seems likely that it was due to contamination at the dairy with "soda ash," a detergent substance used for cleaning the pasteurising plant.

The milk supplied to the school was, at that time, put through a retarder after pasteurisation, and the procedure was such that it was possible for a small quantity of milk only to become contaminated whilst in the retarder.

The detergent powder was found to consist of anhydrous soap, sodium carbonate, sulphate and chloride, and silica abrasive. The sulphate and the silica, especially the latter, could be irritant to the stomach.

Outbreak due to Brawn.

In May four persons in one house and two persons in another were taken ill about two hours after eating some brawn bought independently from a common source. Blood serum from the patients tested 14 days after the onset of the illness did not agglutinate organisms of the salmonella group. Examination of brawn made at the same time as that which was suspected was carried out bacteriologically and chemically with negative results, and the investigation was consequently inconclusive.

B. Enteritidis Gaertner.

In June there occurred a rather extensive outbreak of food poisoning caused by infection with *B. enteritidis gaertner*. Three cases only were discovered in Manchester, but 40 children in a Salford institution and some 16 other

persons were affected. The poisoning ensued upon the consumption of potted meat, made of beef steak at the institution, which had become infected by *B. enteritidis gaertner*.

The onset of illness in most cases was about 12 hours after consumption. All who partook were ill, and the symptoms consisted of high temperature, shivering, diarrhoea and vomiting, abdominal pain, and headache. The illness lasted two or three days, but the patients were weak and exhausted for a week or so afterwards.

B. gaertner was isolated from some of the potted meat left over, and a similar bacillus was recovered from the stools of a number of the victims, including those persons living in Manchester. The Salford City Pathologist reported that nothing was found which would suggest that the outbreak was due to an infected human being and, although the carcass from which the meat was obtained was untraced, it was suspected that the cause of the outbreak was an infected animal.

Bacillus Aertrycke.

In July seven persons out of a family of ten were attacked by food poisoning. *B. aertrycke* was isolated from the stools and the blood serum of three of the patients agglutinated these organisms in dilutions of 1 in 2,560, 1 in 320, and 1 in 160.

No food which is usually associated with food poisoning had been eaten prior to the illness, and the only foods in the home available for examination were beef dripping, one hen's egg, and some pickles. These were examined but no organisms of the salmonella group were found.

Bacillus Aertrycke.

In August a case of suspected food poisoning was reported by the Coroner after an inquest at which the verdict was "death from acute toxic myocarditis resulting from infection with *B. aertrycke*."

A man aged 27 years had been in poor health for some months. On August 24th the only foodstuffs eaten were "Force," milk, bread, tea, sugar, and arrowroot biscuits, the last meal being taken at 4-30 p.m. At 4 a.m. the next day he began vomiting and had diarrhoea. At 7-30 p.m. on this day he complained of pain in the chest. He soon afterwards became comatose and died on August 31st.

A post-mortem examination was made and *B. aertrycke* was isolated from the intestinal contents, from the spleen, and from the gall bladder.

The case was an unusual one, and it seems possible that the man died from some complaint other than food poisoning and that he was merely a carrier of aertrycke organisms.

Tinned Salmon.

In October two cases of alleged food poisoning occurred thought to be due to eating tinned salmon. Investigation did not reveal the cause of the illness.

PUBLIC HEALTH (MEAT) REGULATIONS, 1924.

These regulations, which came into force on May 1st, 1925, are administered by the Public Health Committee in so far as Part V., which relates to shops, stores, etc., is concerned. With a view to the equitable administration of the regulations, the co-operation of the interested trades was sought at the time the regulations came into force and mutual agreement with the associations concerned was arrived at on the following points:—

Requirements.

1. Meat shall not be hung outside premises.
2. All meat which is displayed must be protected from the dust of the streets by glass windows.
3. Reasonable precautions must be taken to protect meat from flies.
4. The provision of a covered receptacle of suitable material for refuse and sweepings is imperative, and the receptacle must be kept clean.
5. Shops must be adequately ventilated.

Suggestions.

1. That means be adopted for keeping all prepared meats covered. (Transparent paper could be used with good effects.)
2. That each shop be provided with a cold store or ice box for the storage of meat.
3. Persons engaged in the sale or handling of meat should wear white overalls. (Coloured ones now in use when worn out to be replaced by white.)
4. That notices be exhibited in shops to the effect that foodstuffs should not be handled by customers.
5. That, wherever possible, vertical glass fronts be provided on counters to protect meat, etc., from contact with or handling by customers.
6. Particulars of structural arrangements required in premises where food is prepared may be obtained on application to the Medical Officer of Health.

These agreed conditions have greatly facilitated the administration of the Meat Regulations. This strikingly illustrates the value of conference between the Public Health Committee and accredited representatives of interested trades as a preliminary to administration of such regulations.

890 visits were paid during the year to meat shops by the special inspectors, and it was found that these requirements and suggestions were generally being carried out.

REPORT FROM MARKETS DEPARTMENT AS TO SUPERVISION OF MEAT AND OTHER FOODS.

The Medical Officer of Health is indebted to Mr. A. Chadwick, General Superintendent, for the following particulars relating to the operations of the Markets Department during the year ending 31st March, 1935.

The number of animals slaughtered at the city abattoir during certain years is shown in the subjoined statement "A".

The bulk of the meat, fish, fruit, etc., which is condemned is found to be unfit for food on arrival at the markets, railway stations, wholesale houses, etc., and by the system which operates of carrying out an efficient inspection at the centre of distribution, the risk of diseased meat, etc., being exposed in retail shops is lessened.

The staff of inspectors comprises 1 Chief Veterinary Inspector, 3 Assistant Veterinary Inspectors, and 9 Meat, Fish, etc. Inspectors.

Statement "B" shows the total condemnations in the city, and statement "C" the total weight of meat condemned at the city abattoir.

Statement "A."

ANIMALS SLAUGHTERED AT CITY ABATTOIR DURING CERTAIN YEARS.

Year ending 31st March	Cattle	Sheep	Lambs	Calves	Pigs
1900	34,675	106,855	45,595	872	18,163
1910	38,389	193,855	57,553	2,179	10,486
1920	89,143	214,363	48,656	8,202	9,636
1930	73,244	272,868	119,299	5,472	15,259
1931	64,354	240,219	106,091	5,246	14,945
1932	57,418	308,249	95,079	5,474	17,776
1933	56,083	337,398	135,202	6,079	15,460
1934	60,109	333,947	153,408	7,852	11,868
1935	67,735	296,767	146,082	10,067	13,003

Statement "B."

TOTAL CONDEMNATION OF VARIOUS FOODSTUFFS DURING CERTAIN YEARS.

	1929	1930	1931	1932	1933	1934	1935
	Tons	Tons	Tons	Tons	Tons	Tons	Tons
Meat	407 $\frac{3}{4}$	472 $\frac{1}{4}$	434 $\frac{1}{2}$	399 $\frac{1}{4}$	458	537 $\frac{3}{4}$	601 $\frac{1}{2}$
Fish	118 $\frac{1}{2}$	98 $\frac{1}{2}$	135	106 $\frac{3}{4}$	102 $\frac{1}{2}$	108 $\frac{1}{4}$	110 $\frac{1}{2}$
Fruit	28 $\frac{1}{2}$	20 $\frac{1}{2}$	49 $\frac{1}{2}$	42 $\frac{3}{4}$	24 $\frac{1}{2}$	43 $\frac{3}{4}$	70
Vegetables	132 $\frac{3}{4}$	199 $\frac{1}{4}$	179 $\frac{1}{2}$	137 $\frac{3}{4}$	307	113 $\frac{1}{4}$	167 $\frac{1}{2}$
Eggs (number)	786	1,150	..	4,149	..	4,224	5,560
Game (head)	1,097	645	338	122	147	518	1,136
Poultry (head)	3,153	3,440	3,544	4,582	5,577 $\frac{1}{2}$	5,458	5,384
Rabbits (head)	5,325	7,895	9,107	10,401	8,932	7,111	18,717

Statement "C."

MEAT CONDEMNED AT THE CITY ABATTOIR AND WHOLESALE MEAT MARKET
DURING CERTAIN YEARS.

	1929	1930	1931	1932	1933	1934	1935
	Tons	Tons	Tons	Tons	Tons	Tons	Tons
Total weight of meat condemned at the City Abattoir and Wholesale Meat Market	379	451 $\frac{3}{4}$	403 $\frac{3}{4}$	368	426 $\frac{1}{2}$	505 $\frac{3}{4}$	565 $\frac{3}{4}$
Of which the weight of dressed meat consigned from places other than the City was ..	142 $\frac{3}{4}$	167 $\frac{1}{2}$	181 $\frac{1}{4}$	160	180 $\frac{1}{4}$	194 $\frac{3}{4}$	244 $\frac{3}{4}$
Included in which were Imported Offals amounting to	$\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1	4 $\frac{1}{2}$	4 $\frac{1}{4}$	2

AMOUNT OF UNWHOLESOME FOOD CONDEMNED DURING THE YEAR ENDED
31ST MARCH, 1935.

	1933-34	1934-35
MEAT :—	lbs.	lbs.
Beef	1,017,822	1,155,610
Mutton	35,401	30,952
Veal	20,503	23,277
Venison .. .. .	..	353
Pork	121,837	132,835
Imported Offal	9,285	4,585
	1,204,848 = 537 $\frac{3}{4}$ tons	1,347,612 = 601 $\frac{1}{2}$ tons
FISH :—		
Fish	225,141	222,527
Shellfish	17,583	24,811
	242,724 = 108 $\frac{1}{4}$ tons	247,338 = 110 $\frac{1}{2}$ tons

FOOD CONDEMNED DURING THE YEAR—*continued*

	1933-34	1934-35
	HEAD	HEAD
GAME	518	1,136
POULTRY	5,458	5,384
RABBITS	7,111	18,717
	LBS.	LBS.
FRUIT	98,325 = $43\frac{3}{4}$ tons	156,713 = 70 tons
VEGETABLES	253,667 = $113\frac{1}{4}$ tons	375,042 = $167\frac{1}{2}$ tons
MISCELLANEOUS :—	NO.	NO.
Eggs	4,224	5,560
	LBS.	LBS.
Condensed Milk	34	183
Sundry Provisions	1,483	1,839

With the exception of the following, which were seized while deposited or exposed for sale, the quantities given in the preceding tables were surrendered after being condemned by the Inspectors of the Department :—

	1933-34	1934-35
	LBS.	LBS.
Meat	239	$4\frac{1}{2}$
Fish	32	..
Fruit .. .. .	..	215
Sundry Provisions .. .. .	..	4

NOTE :—The term “surrendered” includes cases in which the Inspectors have discovered the unwholesome food in the course of their duty, but in which, owing to salesman’s acceptance of the Inspector’s decision, it has been deemed unnecessary to obtain a magistrate’s order prior to destruction.

VETERINARY AND MILK CONTROL SECTION.

R. C. LOCKE, M.R.C.V.S., D.V.S.M. (Vict.),

Veterinary Officer.

The amount of milk consumed daily in the City has been estimated as 45,000 to 50,000 gallons. It is further estimated that approximately 80 per cent. of this milk is subjected to the process of pasteurisation prior to delivery to the consumer.

From the returns made by dairymen of the farms from which they obtain their milk it is calculated that the percentage of the total supply derived from the neighbouring counties is as follows :—

County	Percentage of total supply
Cheshire	50.00
Staffordshire	22.50
Lancashire	13.20
Derbyshire.. ..	12.50

with small amounts from Yorkshire, Shropshire, and Cumberland.

The measures taken to control the milk supply have been the same as in previous years, namely, the examination of dairy herds within the City by the Veterinary Officer, the examination of bulk samples of milk, and the inspection of dairies and milkshops.

The premises used for the manufacture and/or sale of ice cream have also been regularly visited, special attention having been given to general cleanliness and sterilisation of utensils.

The work of the section is referred to below under the various headings, followed by a summary in tabular form.

City Farms.

There has been a reduction in the number of farm premises from 61 to 59, with a corresponding decrease of cattle accommodation from 1,556 to 1,523.

Bulk sampling of the milk from each farm has been carried out as in previous years in addition to periodical examination of the cattle, and as a result six cows suffering from tuberculosis of the udder have been discovered and dealt with under the Tuberculosis Order, 1925.

A scheme introduced by the Milk Marketing Board for the payment of a bonus of 1d. per gallon to those farmers who obtain a producer's licence for Grade A milk and enrol on the Roll of Accredited Producers became operative during the year. Six farmers in the City accordingly became licensed in order to take advantage of the scheme, and it is confidently expected that this number will be increased during the forthcoming year. The necessary quarterly examinations of the herds have been carried out by the Veterinary Officer, and

samples of the milk have been taken for bacteriological examination at regular intervals. No great difficulty has been experienced by the farmers in producing a milk which satisfies the required standard of cleanliness.

Country Farms.

During 1935 a larger number of samples of milk supplied to the City from farms situated outside the boundary has been examined than in any previous year, namely, 1,035, as compared with the previous record of 927 farms in 1933. 136 of these were proved to contain *b. tuberculosis*, that is, 13.14 per cent. This incidence rate is higher than that shown in the two preceding years, and it is somewhat disappointing that the reduction in the rates for 1933 and 1934 has not been maintained. It is hardly to be expected, however, that the efforts of the whole-time veterinary staffs so recently established in the counties from which the City's milk supply is derived can make any appreciable reduction in the incidence of tuberculosis in such a short space of time. In this connection it is gratifying to be able to report that the county of Derbyshire has followed the lead of Cheshire and Staffordshire in appointing a Chief Veterinary officer and six assistants. It is to be hoped that the county of Lancashire will also inaugurate a system whereby the dairy herds are subjected to routine veterinary inspection at an early date. This would put Manchester in the position of having practically the whole of its milk supply from counties where such inspections are established.

City Dairies and Milkshops.

The milkshops inspectors have paid over 6,000 visits of inspection to dairies and milkshops. Particular attention has been directed to the general cleanliness of the premises and to the nature of the stock sold along with milk. The number of registered shops from which loose milk is sold has been reduced from 1,015 at the end of 1934 to 948, but a large number of shops continue to sell bottled milk only.

Very few flagrant breaches of the Milk and Dairies Regulations, sufficient to warrant legal action, have been discovered, and particulars of such proceedings are shown in Table IV.

Sixty-five samples of Certified and Grade A (Tuberculin Tested) milks have been taken by the milkshops inspectors on behalf of the Ministry of Health.

Ice Cream.

There has been a further increase in the number of premises registered for the manufacture and/or sale of ice cream—563 such premises compared with 523 at the end of 1934.

Constant supervision has been exercised and in only one case has it been found necessary to take legal proceedings in respect of dirty premises.

A number of samples were taken during the year of the different types of commodity sold under the heading of "ice cream." The results showed that the fat content varied from 2·4 per cent. in the case of the street vendor selling at a cheap rate to 16·2 per cent. in the case of the higher priced article sold from high-class premises. These results demonstrate the urgent necessity for the fixing of a minimum quality standard for ice cream, especially as the demand for this article appears to be steadily increasing.

Manchester Corporation Hospitals Milk Supply.

The policy of frequent examinations of samples of pasteurised milk supplied to the Corporation hospitals and institutions has been carried out as before and the results have been entirely satisfactory both as regards quality, cleanliness, and freedom from tuberculous infection.

The raw milk supplied to Monsall Hospital and Rose Hill Convalescent Home has also been sampled frequently and on two occasions was found to be infected with b. tuberculosis. On each occasion the milk was pasteurised until the infection was cleared. In all other respects the supply has been satisfactory.

The milk supplied to the Langho Epileptic Colony and Booth Hall Hospital from the herd at the Langho Colony farms has been consistently good throughout the year. One cow suffering from tuberculosis of the udder was detected and slaughtered under the Tuberculosis Order, 1925.

The herd at the Abergele Sanatorium farm, from which milk is supplied to the Sanatorium, has been examined frequently by the Veterinary Officer during the year. The quality and bacterial content have been shown by the examination of samples to be of a very high standard. One cow suffering from tuberculosis of the udder was slaughtered under the Tuberculosis Order, 1925.

General.

In addition to the Accredited Herds Scheme previously referred to, the Milk Marketing Board introduced a scheme for the supply of milk to school children at a reduced rate. The scheme provided that the Medical Officer of Health, in consultation with the School Medical Officer, should approve or otherwise of sources of supply to schools. In Manchester the City Council approved the proposals of the Medical Officer of Health that all milk other than Certified and Grade A (Tuberculin Tested) supplied under this scheme must be pasteurised and must be delivered to the schools in bottles. These requirements have been strictly enforced, and special supervision has been carried out by the milkshops inspectors and by means of the regular examination of samples of the milk. One dairyman, in consequence of unsatisfactory results of samples taken, was removed from the list of approved suppliers.

It is estimated that 375,000 gallons of milk per year are supplied to school children in Manchester under the above-named scheme.

APPENDIX.
TABLE I.
PARTICULARS OF VISITS TO FARMS.

<i>City Farms.</i>									
Total number of farms in city	..	..	..	..	..	..	..	..	59
accommodation for 1,523 cows.									
Number of visits paid to farms by Veterinary Officer	..	..	..						98
„ cowsheds inspected	..	..	..	..	..	..	..	..	232
„ cows examined	..	..	..	..	..	..	..	..	1,846
„ cows suffering from tuberculosis of the udder.	..	..	..						6
<i>Country Farms.</i>									
Number of visits paid to farms by Veterinary Officer	..	..	..						61
„ cowsheds inspected	..	..	..	..	..	..	..	..	192
„ cows examined	..	..	..	..	..	..	..	..	2,234
„ cows found with tuberculous udders	..	..	..	..	..	..	..	..	116
„ cows removed from farms prior to visits of Veterinary Officers	..	..	..	..	..	..	..	..	58

TABLE II.
PARTICULARS OF MILK SAMPLES.

<i>Samples Examined for Tubercle Bacilli.</i>									
Collected by Food and Drugs Inspectors at—									
(a) Railway stations	..	..	..	..	..	..	..	..	5
(b) Vehicles entering the city by road	..	..	..	..	..	..	..	..	835
Collected by Milkshops Inspectors at—									
(a) Hospitals and institutions	..	..	..	..	..	..	..	..	21
(b) City dairies and milkshops	..	..	..	..	..	..	..	..	104
(c) Vehicles	..	..	..	..	..	..	..	..	637
(d) Railway stations	..	..	..	..	..	..	..	..	2
(e) City farms	..	..	..	..	..	..	..	..	38
(f) Schools	..	..	..	..	..	..	..	..	26
Number of samples taken at corporation farms	..	..	..	..	..	..	..	..	38
„ „ „ city „ by Veterinary Officer									32
<i>Samples Examined for Chemical Analysis, Bacterial Count, Bacillus Coli, etc.</i>									
Collected by milkshops inspectors at hospitals, dairies, vehicles, schools, etc.	..	..	..	..	..	..	..	..	*856
Collected by milkshops inspectors on behalf of the Ministry of Health									65

* Of these, 354 were also examined for Tubercle Bacilli.

TABLE III.
ANALYSIS OF FARMS TESTED FOR TUBERCLE BACILLI IN MILK
DURING THE YEAR.

County	No. of farmers represented by samples of milk	No. of farmers sending tuberculous milk	Percentage
Cheshire	579	88	15·19
Lancashire	128	15	11·71
Derbyshire	128	15	11·71
Staffordshire	173	16	9·24
Shropshire	3	..	..
Cumberland.. .. .	2	..	..
Yorkshire	22	2	9·99
Totals	1,035	136	13·14

TABLE IV.
THE MILK AND DAIRIES (CONSOLIDATION) ACT, 1915,
THE MILK AND DAIRIES (AMENDMENT) ACT, 1922, and ORDERS.

Number of registered premises—December 31st, 1935	948
„ visits to dairies and milkshops by Milkshops Inspectors..	6,172
„ applications for registration approved	130
„ applications for registration refused	8
„ persons removed from register by resolution of City Council	3
„ milk vessels found uncovered	27
„ milk vessels found dirty	7
„ milkshops found dirty	18
„ premises found in disrepair	3
„ premises with unsatisfactory washing facilities	12
„ milk conveyances found dirty	5
„ milk conveyances without name and address	13
„ milk purveyors found bottling milk in street	2
„ sites inspected for new dairies	4
„ persons warned for opening bottles of milk	10
„ prosecutions taken in respect of bottling milk in street	2
„ prosecutions taken in respect of persons selling milk not being registered for such purpose	1
„ prosecutions taken in respect of using vehicle without name and address on same	1
„ prosecutions in respect of the sale of skimmed milk from vessels not properly labelled	2

TABLE V.
MILK (SPECIAL DESIGNATIONS) ORDER, 1923.
Licences issued during the year.

Producer's licence to use the designation "Grade A"	6
Dealer's licence to use the designation "Certified"	16
Dealer's licence to use the designation "Grade A (Tuberculin Tested)"	40
Dealer's licence to use the designation "Grade A"	15
Dealer's licence to use the designation "Pasteurised" :—	
(a) Pasteurising establishments	17
(b) Shops	11
Supplementary licence to use the designation "Certified"	5
Supplementary licence to use the designation "Grade A (Tuberculin Tested)"	1
Supplementary licence to use the designation "Grade A"	6
Supplementary licence to use the designation "Pasteurised"	7

TABLE VI.
ICE CREAM.

Number of registered premises, 31st December, 1935—

Purpose.

Manufacture for sale	28
Sale	419
Manufacture for sale and sale	116

563 .

Number of visits to ice cream premises by milkshops inspectors..	2,300
„ applications for registration approved	77
„ applications for registration refused	11
„ sites for new premises inspected	31
„ persons warned for using dirty utensils	3
„ „ „ leaving ice cream mixture uncovered	36
„ „ „ having dirty clothing	1
„ „ „ using dirty premises	6
„ premises found unregistered	40
„ „ with unsatisfactory washing facilities..	5
„ prosecutions in respect of the use of unregistered premises	1
„ „ for not taking precautions to prevent contamination of ice cream	1

TABLE VII.

TUBERCULOUS INFECTION IN MILK 1901—1935.

YEAR	Number of farmers represented by samples of milk	Number of farmers sending tuberculous milk	Percentage	Percentage of Farmers from EACH COUNTY whose Milk was proved to contain Tubercle Bacilli									
				Cheshire	Derbyshire	Staffordshire	Shropshire	Lancashire	Yorkshire	Cumberland	Montgomeryshire	Westmorland	Lincolnshire
1901	272	27	9.90	10.46	9.23	8.00	10.00	..	..	..	..	..	..
1902	345	36	10.40	12.72	8.65	4.01	..	8.31	..	..	..	..	..
1903	329	45	13.60	14.76	9.58	15.15	40.00	..	..	..	..	..	..
1904	318	29	9.10	11.17	6.02	..	..	7.14	25.00	..	..	..	..
1905	565	47	8.30	10.26	6.00	6.38	..	2.98	12.50	..	..	..	..
1906	542	42	7.70	8.60	6.50	9.30	12.50	4.00	..	..	..	..	..
1907	562	38	6.76	7.71	4.48	6.94	12.50	3.70	..	..	..	..	..
1908	289	27	9.34	11.56	6.25	7.70	..	2.94	12.50	..	..	..	..
1909	535	31	5.79	4.80	7.47	8.57	11.11	3.33	..	..	..	..	..
1910	468	30	6.41	6.20	8.69	5.55	..	..	..	..	..	..	..
1911	494	51	10.32	11.11	2.50	12.12	10.00	12.20	50.00	..	..	..	..
1912	484	54	11.15	12.94	4.00	10.20	33.33	6.00	10.00	..	..	..	..
1913	486	60	12.51	13.99	11.58	9.26	33.33	5.88	20.00	..	..	..	..
1914	352	34	9.66	12.39	8.19	..	..	2.77	..	..	..	..	..
1915	69	9	13.04	16.21	..	..	..	13.63	..	..	..	..	..
1916	321	38	11.83	11.59	8.80	13.04	..	6.97	..	..	..	..	..
1917	365	37	10.13	13.54	9.30	4.30	..	11.70	..	..	..	..	..
1918	288	18	6.25	8.17	5.12	4.16	..	3.57	..	..	..	..	..
1919	240	20	8.30	8.84	8.00	4.55	..	8.10	..	..	..	..	..
1920	194	29	14.94	18.75	10.71	..	..	5.88	..	..	..	..	..
1921	305	37	12.13	16.23	4.17	..	..	10.52	..	..	..	..	..
1922	243	21	8.64	10.52	6.34	6.66	..	3.57	..	..	..	..	..
1923	296	33	11.14	12.94	7.14	10.34	..	9.75	..	..	..	..	..
1924	453	43	9.49	10.80	8.69	8.82	..	5.12	..	..	..	..	..
1925	292	24	8.21	10.00	11.86	4.34	..	..	..	..	..	..	..
1926	474	49	10.33	12.26	11.76	6.94	..	5.76	..	..	..	..	..
1927	604	67	11.09	14.11	4.62	6.52	..	14.81	..	..	..	..	..
1928	694	122	17.57	18.10	24.50	16.83	33.33	10.00	..	22.22	50.00	..	..
1929	697	88	12.62	12.85	13.00	13.84	..	9.89	42.85	..	..	..	..
1930	750	107	14.26	17.01	14.28	11.62	..	8.10	..	..	..	..	..
1931	896	145	16.18	20.13	16.77	7.85	20.00	15.78	..	..	..	..	..
1932	818	115	14.05	17.39	8.51	11.42	5.00	12.63	8.33	..	20.00	..	..
1933	927	111	11.97	14.48	6.85	14.65	..	10.40	3.70	..	..	..	..
1934	912	109	11.95	14.22	11.19	8.69	..	10.00	4.76	..	..	..	..
1935	1,035	136	13.14	15.19	11.71	9.24	..	11.71	9.99	..	..	..	..
Total	16,914	1,909	11.28	..	..	..	..	..	..	..	..	..	..

TABLE VIII.
ANALYSIS OF SAMPLES OF MILK TESTED AND RESULTS OF INVESTIGATIONS AT FARMS DURING THE YEAR.

SOURCE OF SAMPLES		NUMBER OF SAMPLES EXAMINED FOR TUBERCLE BACILLI				Number of visits paid to Farms	Number of Cows Examined	COWS WITH TUBERCULOUS UDDERS			
		Primary and Subsequent	Control	Total	Positive Results			Condemned on Clinical Examination	Discovered on Microscopical Examination of Milk	Discovered on Biological Examination of Milk	Removed from Farm prior to visit
By Food and Drug Inspectors	Railway Stations	5	..	5	1	..	..	..	..	..	..
	Carts and City Dairies ..	772	63	835	*94	..	..	..	..	..	..
By Milkshops Inspectors	Hospitals and Institutions..	19	2	21	2	..	..	..	..	..	..
	Vehicles, City Farms, City Dairies, Railway Stations, and Schools	762	45	807	†67	..	..	..	..	..	..
By Veterinary Officer	Country Farms { Individual Group ..	..	..	..	..	61	2,234	14	68	34	58
	City Farms { Individual Group ..	21	..	21	4	98	1,846	2	2	2	..
	Corporation Farms { Individual Mixed ..	13	..	13	3	..	..	..	..	..	..
Totals		1,628	110	1,738	175	159	4,080	16	70	36	58

* Includes 10 control samples.
† Includes 10 control samples.

TUBERCULOSIS.

By DR. D. P. SUTHERLAND, Senior Tuberculosis Officer.

For the year 1935 the death rate from all forms of tuberculosis continues to show a decline and once more record low figures are found both in respect of pulmonary tuberculosis and non-pulmonary tuberculosis.

The pulmonary tuberculosis death rate is $\cdot 92$ per 1,000 and the non-pulmonary death rate $\cdot 12$ per 1,000.

Pulmonary Tuberculosis.

Males.—Last year it was noted that the abnormally rapid decline in the years 1932 and 1933 was being balanced by a slightly rising figure. This rise has now been checked, and another substantial reduction from $1\cdot 32$ per 1,000 to $1\cdot 17$ per 1,000 is recorded. All ages show the declined mortality, but the greatest gain has been in the age group 20–24 years.

Females.—The female deaths from pulmonary tuberculosis show a slight rise, namely, from $\cdot 66$ per 1,000 to $\cdot 69$ per 1,000. This was anticipated in the report for 1934, where it was stated that owing to the low figure a distortion in the regularity of the curve of decline was to be expected, resulting in a diminished fall or a slight rise before stability was established. This occurrence we now observe to have taken place, but it still leaves the rate of fall above the average, and the curve may therefore be somewhat irregular for another year or two.

The slight increase in the deaths amongst females is noted in the 15–19 age group, the 25–34 age group, and to a smaller degree in the 45–54 and 65 and upwards age groups. The alternate age groups show declines in all the significant figures.

Non-Pulmonary Tuberculosis.

The deaths for both men and women in this group show a reduction, and the total death rate is down to $\cdot 12$ per 1,000 from $\cdot 16$ per 1,000 in 1934.

The number of cases of tuberculous meningitis is less by 17, and this has had an appreciable effect in reducing the mortality figures.

Notification.

The notification rate for all forms of tuberculosis in 1935 shows a decline to 1·69 per 1,000—the figure for 1934 being 1·79 per 1,000. This decline is due almost entirely to a diminution in cases of pulmonary tuberculosis, the figures being 1·30 for that form of disease, as compared with 1·39 in the previous year.

There is also a slight but insignificant diminution in the cases of non-pulmonary tuberculosis, which figures to two places of decimals do not reveal. The pulmonary notification rate shows a rather steeper fall in its curve in relation to the diminished death rate than is desirable, and it will probably be corrected during the next two years. Both sexes show the fall in notification rates, but the improvement has been chiefly in the female cases. This gain as is seen from the tables is not only relative to last year's but is absolute in regard to the total figures. The age groups showing this improvement are those from 10 to 34 years.

The non-pulmonary notification rate when divided into males and females shows an increase amongst females at practically all ages, and a diminution in male cases also throughout the whole range. These phenomena are probably of no particular significance as they merely reverse the order found in the 1934 figures.

Attention may again be drawn to the remarks made regarding notification, and the paragraph referring to this matter given last year was as follows :—

“ There is at times a reluctance on the part of patients to consult their doctors for what they regard as trifling symptoms of ill health. But it must be emphasised that these departures from normal well-being may be the early evidences of trouble, which, attended to at this stage, will in most cases result in recovery. When, as still too frequently happens, the notification of illness is made when the disease has already advanced to a considerable degree, treatment may have to be very prolonged and many more dangers to life occur. In any case of doubtful nature the services of the full medical staff of the Tuberculosis Offices are at the disposal of practitioners, and cases are seen either at the clinic or their homes as occasion demands. The co-operation which exists in this respect continues to extend and its further development in every way possible will be encouraged.”

This co-operation is very effective. There have for many years now been only a few cases in Manchester where notification was not made before death, and this year the number has been reduced to less than 1 per cent. for pulmonary tuberculosis.

The statistics for the year are set out in the following tables :—

TABLE I.
Rates per Thousand of the Population.

COMPARATIVE FIGURES.

	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
<i>Death Rates :—</i>										
General	13·28	13·90	13·06	15·51	13·07	13·86	13·03	13·41	12·24	12·00
All respiratory diseases (except tuberculosis)	2·61	2·93	2·42	3·25	2·10	2·59	1·98	1·97	1·47	1·00
Tuberculosis (all forms)	1·41	1·38	1·29	1·4	1·37	1·29	1·17	1·15	1·13	1·00
Phthisis, both sexes	1·19	1·15	1·10	1·21	1·15	1·12	1·00	1·00	·97	·90
,, males only	1·58	1·41	1·42	1·54	1·41	1·43	1·23	1·25	1·32	1·00
,, females only	·84	·92	·80	·91	·91	·82	·79	·78	·66	·60
Non-pulmonary tuberculosis, both sexes	·22	·22	·19	·19	·22	·17	·16	·15	·16	·10
<i>Tuberculosis Notification Rates :—</i>										
All forms	2·44	2·53	2·51	2·28	2·23	2·32	1·93	1·80	1·79	1·00
Pulmonary only	1·84	1·88	1·87	1·79	1·64	1·67	1·41	1·40	1·39	1·00
Non-pulmonary only	·60	·65	·64	·48	·59	·65	·52	·40	·40	·00

TABLE 2.

NEW CASES AND DEATHS DURING 1935.

Age Periods	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0	3	..	3	..	3	..	2	1
1	4	5	25	20	..	2	9	9
5	14	21	34	22	3	4	3	6
10	20	11	26	19	..	4	3	3
15	47	59	12	19	17	39	3	5
20	62	89	12	15	37	56	8	4
25	116	93	14	35	77	75	4	4
35	121	64	7	16	84	38	5	9
45	123	44	7	6	117	38	6	2
55	67	22	4	5	64	17	4	4
65 and upwards ..	15	6	2	4	26	10	..	1
Totals ..	592	414	146	161	428	283	47	48

The number of non-notified deaths from pulmonary tuberculosis was 7 = .98 per cent.

The number of non-notified deaths from non-pulmonary tuberculosis was 15 = 15.78 per cent.*

The percentage of non-notified deaths from all forms of tuberculosis was 2.73.

There were, in addition, 12 deaths of non-notified cases outside Manchester which were adjudged by the Registrar-General to be properly referable to this area.

* It is to be noted that 5 of the 15 cases were certified as cases of tubercular meningitis. These cases as a rule have a very short illness and diagnosis is frequently in doubt during life.

TABLE 3.

PRIMARY NOTIFICATIONS AND DEATHS FROM PULMONARY TUBERCULOSIS, 1917-1935.

Age—Groups.

Pulmonary Tuberculosis	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	TOTAL	
												Notifications	Deaths
Notifications, 1917—1925.. Deaths, " " ..	46 31	348 120	939 95	959 213	1465 851	1499 889	2817 1579	2843 1962	2235 1863	1065 892	429 371	14645	8866
Notifications, 1926 .. Deaths, " " ..	14 6	39 21	43 6	68 9	165 66	188 106	282 171	254 200	217 186	104 99	33 35	1407	905
Notifications, 1927 .. Deaths, " " ..	3 3	36 15	75 9	81 14	138 83	186 110	251 157	275 159	245 198	114 101	34 32	1438	881
Notifications, 1928 .. Deaths, " " ..	3 2	16 8	63 6	66 12	144 65	158 109	319 161	258 167	233 182	149 100	29 31	1438	843
Notifications, 1929 .. Deaths, " " ..	1 1	18 7	38 3	43 7	146 76	191 117	294 179	254 190	235 191	135 121	30 38	1385	930
Notifications, 1930 .. Deaths, " " ..	2 6	11 2	55 6	37 9	147 89	184 110	263 200	227 150	203 168	122 129	36 34	1287	903
Notifications, 1931 .. Deaths, " " ..	1 3	10 4	75 6	63 10	143 67	191 111	263 195	209 151	191 166	113 109	26 33	1285	855
Notifications, 1932 .. Deaths, " " ..	1 2	24 17	32 2	28 10	146 52	158 114	234 151	194 136	172 167	74 91	24 28	1087	770
Notifications, 1933 .. Deaths, " " ..	3 2	11 4	17 3	27 7	125 68	170 105	253 159	176 161	188 146	85 95	26 23	1081	773
Notifications, 1934 .. Deaths, " " ..	.. 4	9 7	19 6	40 6	127 49	170 107	228 146	172 141	164 152	104 98	40 35	1073	751
Notifications, 1935 .. Deaths, " " ..	3 3	9 2	35 7	31 4	106 56	151 93	209 152	185 122	167 155	89 81	21 36	1006	711
Total notifications .. Total deaths ..	77 63	531 207	1391 149	1443 301	2852 1522	3246 1971	5413 3250	5047 3539	4250 3574	2154 1916	728 696	27132	17188

TABLE 4.

PRIMARY NOTIFICATIONS AND DEATHS FROM NON-PULMONARY TUBERCULOSIS, 1917-1935.

Age—Groups.

Non-pulmonary Tuberculosis	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	TOTAL	
												Notifications	Deaths
Notifications, 1917-1925 ..	167	232	1208	1020	730	374	393	254	193	127	81	5628	2233
Deaths, " " ..	17	15	82	81	63	38	38	23	23	6	6	463	170
Notifications, 1926 ..	11	9	107	75	60	47	47	28	15	12	5	503	172
Deaths, " " ..	12	11	112	71	71	46	47	26	18	8	5	490	149
Notifications, 1927 ..	11	13	78	40	55	28	44	27	13	9	5	375	152
Deaths, " " ..	17	10	108	63	46	42	41	20	20	16	4	466	174
Notifications, 1928 ..	10	10	95	87	67	40	55	22	23	6	8	496	132
Deaths, " " ..	6	7	86	49	55	33	45	30	18	8	3	402	126
Notifications, 1929 ..	6	7	70	41	33	33	35	27	13	8	1	313	114
Deaths, " " ..	7	9	64	43	37	30	39	21	11	6	3	313	125
Notifications, 1930 ..	3	3	56	45	31	27	49	23	13	9	6	307	95
Deaths, " " ..	267	326	2066	1615	1248	738	833	501	360	215	127	9756	3642
Total notifications	267	326	2066	1615	1248	738	833	501	360	215	127	9756	3642
Total deaths	3	3	9	6	8	12	8	14	8	8	1	95	95

TABLE 5.

PRIMARY NOTIFICATIONS OF PULMONARY AND NON-PULMONARY TUBERCULOSIS
RECEIVED FROM MUNICIPAL WARDS DURING 1935

Wards	Pulmonary	Non-Pulmonary	Totals
1. Exchange	—	—	—
2. New Cross	51	14	65
3. St. Clement's	6	1	7
4. Oxford	6	—	6
5. St. John's	10	1	11
6. St. Ann's	—	—	—
7. St. Michael's	35	2	37
8. Collyhurst	37	11	48
9. Cheetham	30	3	33
10. Collegiate Church	31	5	36
11. Crumpsall	21	6	27
12. Blackley	20	5	25
13. Harpurhey	34	2	36
14. Moston	22	7	29
15. Newton Heath	27	8	35
16. Miles Platting	33	6	39
17. Bradford	36	10	46
18. Beswick	28	16	44
19. Ardwick	37	9	46
20. Openshaw	34	11	45
21. St. Mark's	35	7	42
22. Longsight	19	5	24
23. All Saints'	43	12	55
24. St. Luke's	43	13	56
25. Medlock Street	40	17	57
26. St. George's	39	11	50
27. Moss Side East	30	14	44
28. Moss Side West	27	19	46
29. Chorlton-cum-Hardy	46	12	58
30. Didsbury	21	11	32
31. Withington	43	21	64
32. Gorton North	17	3	20
33. Gorton South	28	4	32
34. Levenshulme	13	4	17
35. Rusholme	30	7	37
36. Wythenshawe	34	30	64
Total—City of Manchester	1,006	307	1,313

TABLE 6.

SOURCES OF NOTIFICATION OF TUBERCULOSIS DURING 1935.

Source	Pulmonary	Non-Pulmonary	Totals
Crumpsall Hospital	71	8	79
Withington Hospital	132	27	159
Booth Hall Hospital.. .. .	15	21	36
District Medical Officers	1	—	1
Manchester Royal Infirmary	35	77	112
Ancoats Hospital	16	16	32
Skin Hospital	—	16	16
St. Mary's Hospital	5	9	14
Northern Hospital	9	8	17
Jewish Hospital	7	—	7
Pendlebury Hospital	—	11	11
Babies' Hospital	1	—	1
Hulme Dispensary	1	1	2
Gartside Street Dispensary	2	5	7
Hardman Street Dispensary	13	—	13
Asylums	2	—	2
Schools	1	5	6
Tuberculosis Staff	53	10	63
Military	3	—	3
Various Sources	53	15	68
Private Practitioners	586	76	662
Child Welfare Centres	—	2	2
Swinton House	—	—	—
Total	1,006	307	1,313

192 tenants have allowed the removal of bedding, etc., for disinfection or destruction.

85,734 cardboard boxes have been prepared in the office and supplied to patients for spitting purposes in the home.

528 sputum bottles have been supplied for use outside the house.

14,962 visits have been made by the Enquiry Officers during the year.

52,496 letters were sent out.

525 notices warning against spitting on floors, etc., have been supplied to offices and workshops.

TABLE 7.
SOURCES OF PRIMARY NOTIFICATION OF NON-PULMONARY CASES FOR THE
YEARS 1918 TO 1935.

Source	1918- 1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Crumpsall Hospital	191	13	14	16	20	20	20	19	10	15	8
Withington Hospital	163	20	11	13	16	21	18	13	7	13	21
Booth Hall Hospital	368	52	58	43	28	64	63	59	35	38	21
Outside District Medical Officers	5	..	..	..	..	2	..	..	1	..	..
Royal Infirmary	751	80	106	98	60	60	92	78	59	55	77
Ancoats Hospital	403	50	47	40	22	33	34	21	18	19	16
Skin Hospital	342	38	37	37	29	36	33	28	24	18	16
St. Mary's Hospital	102	7	17	13	6	8	10	..	1	7	9
Northern Hospital	82	7	7	9	3	2	10	11	2	3	8
Jewish Hospital	49	7	1	7	3	5	6	1	..	1	..
Pendlebury Hospital	54	10	5	12	10	30	26	15	13	12	11
Babies' Hospital .. .. .	..	6	2	..	..	2	2	3	8	2	..
Hulme Dispensary	2	2	..	..	..	..	..	..	..	..	1
Gartside Street Dispensary..	382	33	34	22	21	23	15	20	9	9	5
Hardman Street Dispensary.	142	8	9	21	16	20	9	1	..	..	..
Bowdon Hospital	6	..	..	1	1	..	..	..	..	..	..
Asylums	28	1	1	..	2	2	2	..	1	..	..
Schools	197	11	10	20	4	9	23	27	24	16	5
Tuberculosis Office Staff ..	106	6	11	12	20	13	10	18	20	14	10
Military	30	2	1	..	..	..	..	1	1	1	..
Various Sources	133	9	19	22	12	25	16	16	11	16	15
Private Practititoners	1289	101	113	104	102	89	96	70	69	74	76
Child Welfare Centres.. ..	..	..	..	..	..	2	..	1	..	..	2
Swinton House .. .. .	..	..	..	..	..	..	11	..	..	..	..
	4825	463	503	490	375	466	496	402	313	313	307

TABLE 8.
NUMBER OF NEW CASES OF PULMONARY TUBERCULOSIS
NOTIFIED DURING THE YEARS 1900 TO 1935.

Year					Poor-law Cases	Institutions, etc.	Private Practitioners	Total
(1)	1900*	..	..	..	578	455	540	1,573
	1901	..	..	..	625	373	341	1,339
	1902	..	..	..	667	305	303	1,275
	1903	..	..	..	556	550	251	1,357
	1904	..	..	..	512	440	250	1,202
	1905	..	..	..	527	588	291	1,406
	1906	..	..	..	565	510	304	1,379
	1907	..	..	..	634	646	310	1,590
(2)	1908	..	..	..	659	498	346	1,503
	1909	..	..	..	681	542	384	1,607
	1910	..	..	..	543	760	356	1,659
(3)	1911	..	..	..	517	897	423	1,837
(4)	1912	..	..	..	488	947	969	2,404
(5)	1913	..	..	..	345	717	1,350	2,412
	1914	..	..	..	483	877	1,304	2,664
	1915	..	..	..	279	740	1,194	2,213
	1916	..	..	..	322	817	1,410	2,549
	1917	..	..	..	470	716	1,061	2,247
	1918	..	..	..	268	563	1,015	1,846
	1919	..	..	..	208	538	845	1,591
	1920	..	..	..	206	629	672	1,507
	1921	..	..	..	257	632	722	1,611
	1922	..	..	..	233	567	656	1,456
	1923	..	..	..	239	546	659	1,444
	1924	..	..	..	223	555	731	1,509
	1925	..	..	..	262	496	746	1,504
	1926	..	..	..	220	422	765	1,407
	1927	..	..	..	241	441	756	1,438
	1928	..	..	..	253	361	824	1,438
	1929	..	..	..	201	382	802	1,385
	1930	..	..	..	201	377	709	1,287
					<i>Transferred Hospitals</i>			
	1931	..	..	..	206	362	717	1,285
	1932	..	..	..	202	228	657	1,087
	1933	..	..	..	205	213	663	1,081
	1934	..	..	..	242	197	634	1,073
	1935	..	..	..	218	202	586	1,006
Total					13,536	19,089	24,546	57,171

* This table does not include 425 cases notified in 1899.

(1). Voluntary notification of Pulmonary Tuberculosis—Manchester scheme.

(2). Compulsory notification (Tuberculosis Regulations) from Poor Law institutions.

(3). Compulsory notification from voluntary institutions.

(4). Compulsory notification of Pulmonary Tuberculosis by all practitioners.

(5). Compulsory notification of all forms of Tuberculosis.

TABLE 9.

NUMBER OF NEW CASES OF NON-PULMONARY TUBERCULOSIS NOTIFIED
DURING THE YEARS 1913-1935.

Year	Total		Total
	Males	Females	
1913	759	714	1,473
1914	519	413	932
1915	422	415	837
1916	418	467	885
1917	433	449	882
1918	345	353	698
1919	206	228	434
1920	280	257	537
1921	295	281	576
1922	321	284	605
1923	350	380	730
1924	316	307	623
1925	322	300	622
1926	239	224	463
1927	277	226	503
1928	214	276	490
1929	204	171	375
1930	251	215	466
1931	259	237	496
1932	201	201	402
1933	154	159	313
1934	170	143	313
1935	146	161	307
Total	7,101	6,861	13,962

TABLE 10.

TUBERCULOSIS (NON-PULMONARY).—PRIMARY CASES NOTIFIED DURING 1935.—AGE GROUPS AND SITE.

Location of Disease	AGE GROUPS																		Totals			
	0—		5—		10—		15—		20—		25—		35—		45—		55—				65—	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females			Males	Females
Brain:—Tumour	5	7	4	4	1	2	2	1	1	1	5	13	8	1	2	1	1	1	2	14	17	
Meninges	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hydrocephalus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Glands:—Cervical	15	6	18	9	9	10	2	5	1	3	3	13	1	2	2	1	1	..	2	53	57	
Mesenteric	1	1	..	..	2	..	..	1	1	..	..	..	..	..	..	..	..	..	4	3	
Axillary	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Inguinal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Tuberculous Peritonitis	1	1	2	1	1	..	..	4	2	..	..	4	1	..	..	..	..	..	7	11	..
Tuberculosis of Abdomen	..	1	5	1	3	2	1	1	..	..	1	1	..	..	..	..	..	..	10	6	..
of Breast	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	2
of Intestines	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Joints:—Spine	5	2	3	1	1	1	2	1	2	3	3	2	1	1	1	1	1	1	7	12	..	
Hip	..	..	1	1	3	1	1	1	1	1	1	2	..	..	..	..	..	..	19	6	..
Elbow	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2	1	..
Ankle	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	3	..
Wrist	..	..	..	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	3	..
Shoulder	..	..	..	..	2	1	..	1	1	..	..	2	..	..	..	..	..	..	2	3	..
Knee	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	5	..
Bones:—Various	..	..	..	1	2	..	2	2	1	..	1	3	1	2	2	..	1	1	7	8	..
Tuberculosis of Skin	..	1	1	..	..	3	2	..	1	4	2	4	1	..	..	1	1	..	7	14	..
General Tuberculosis	..	..	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	2	..
Special Organs:—Ear	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bladder, etc.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..
Kidney	..	..	..	..	..	..	2	..	1	1	..	2	..	..	..	..	1	..	1	3	..
Testicle, etc.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	7	..	..
Muscles, etc.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Rectum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unclassified	..	..	..	..	..	..	1	1	..	1	..	1	..	..	..	..	..	..	..	3	..
Totals	28	20	34	22	26	19	12	19	12	15	14	35	7	16	7	6	4	5	2	4	146	161

TABLE II.—VARIOUS STATISTICS RELATING TO THE NOTIFICATION OF TUBERCULOSIS.

	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1914 to 1921	1899 Sept. 1st to 1913 Dec. 31st	Total
Cases Visited and Registered—																	
Males	738	836	804	828	975	1014	1058	1106	1173	1100	1232	1204	1277	1324	13551	14170	42390
Females	584	598	622	723	806	806	809	919	866	872	937	1032	1023	1024	10120	8854	30595
Totals	1322	1434	1426	1551	1781	1820	1867	2025	2039	1972	2169	2236	2300	2348	23671	23024	72985
Houses Disinfected—																	
1. By Corporation—																	
(a) With solution of chlorinated lime only .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	997	14585	9015	24597
(b) With lime solution only .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	126	126
(c) By Esmarch's method and solution of chlorinated lime .. .. .	..	..	..	..	..	..	..	..	..	..	..	..	..	717	7416	17232	29875
(d) † By fumigating lamp	2608	2866	2952	2991	3224	3115	2934	2693	2083	1635	128	..	..	..	..	..	27229
Totals	2608	2866	2952	2991	3224	3115	2934	2693	2083	1635	1460	1571	1607	1714	22001	26373	81827
2. By Tenants—																	
Esmarch's method or chlorinated lime, etc.	5108	5614	5791	5802	6342	7032	7192	6868	7338	6967	6392	5647	5885	6268	33314	36919	158479
Totals	7716	8480	8743	8793	9566	10147	10126	9561	9421	8602	7852	7218	7492	7982	55315	63292	240306
Specimens of Sputum, examined—																	
Positive	846	1002	966	649	408	360	392	360	348	347	325	391	558	528	4696	6705	18881
Negative	4809	4957	4734	3589	2236	2039	1698	1548	1573	1363	1415	1419	1753	1946	12773	12176	60028
Totals	5655	5959	5700	4238	2644	2399	2090	1908	1921	1710	1740	1810	2311	2474	17469	18881	78909
Cases admitted to Hospital and Sanatoria	2347	2368	2275	2038	2275	2033	1919	1948	2062	1844	2027	2077	1942	2052	17557	22669	69433
Notified from Common Lodging houses	24	28	43	44	45	62	71	62	56	53	76	65	84	80	1224	3109	5126
Number of cases under observation ..	8271	8650	9017	9441	9759	10060	10197	10494	10586	10680	10379	9949	9561	9258	55281	33702 approx.	..

† Method commenced on 1st December, 1925.

TABLE 12.—RETURN SHOWING THE WORK OF THE CLINIC DURING THE YEAR 1935.

Diagnosis	Pulmonary						Non-Pulmonary						Total			
	Adults			Children			Adults			Children			Adults		Children	
	M.	F.		M.	F.		M.	F.		M.	F.		M.	F.		
A.—New cases examined during the year (excluding contacts)—																
(a) Definitely tuberculous	450	313		27	22		50	74		61	42		500	387	88	64
(b) Diagnosis not completed .. .. .	..	..		..	..		..	..		..	..		48	37	11	10
(c) Non-tuberculous .. .. .	..	..		..	..		..	..		..	..		382	345	100	102
B.—Contacts examined during the year—																
(a) Definitely tuberculous	32	27		12	5		..	..		6	5		32	27	18	10
(b) Diagnosis not completed .. .. .	..	..		..	..		..	..		..	..		8	14	20	13
(c) Non-tuberculous .. .. .	..	..		..	..		..	..		..	..		75	166	343	330
C.—Cases written off the Dispensary Register as—																
(a) Recovered	73	63		25	16		22	33		64	43		95	96	89	59
(b) Non-tuberculous .. .. .	..	..		..	..		..	..		..	..		563	623	489	479
D.—Number of persons on Dispensary Register on December 31st—																
(a) Definitely tuberculous	2255	1700		288	258		396	496		498	388		2651	2196	786	646
(b) Diagnosis not completed .. .. .	..	..		..	..		..	..		..	..		56	51	31	23

Total number of cases of Tuberculosis who received Treatment from the Clinic 892

Total number of attendances at the Clinic 22,253

TABLE 13.
INSURED CASES APPLYING FOR TREATMENT FOR THE YEARS 1914-1935.

	Males	Females	Total
1914	730	321	1,051
1915	572	315	887
1916	747	316	1,063
1917	728	359	1,087
1918	642	261	903
1919	630	255	885
1920	645	250	895
1921	615	255	870
1922	543	265	808
1923	539	291	830
1924	597	371	968
1925	610	327	937
1926	562	368	930
1927	555	296	851
1928	612	372	984
1929	610	376	986
1930	551	352	903
1931	555	360	915
1932	451	323	774
1933	503	281	784
1934	471	284	755
1935	428	283	711

Cases of discharged soldiers referred for treatment—189.

Number of patients who had so far recovered that no signs of active disease were found : Insured—340 ; Uninsured—351.

Contacts examined at their homes and at the Clinic—1,056 ; of these, definite signs of tuberculosis were found in 87.

Grants of food were made in 3,213 instances to 490 families, and 7 grants of clothing were supplied to 7 patients in hospital and sanatoria to enable them to derive full benefit from treatment.

Special visits to the number of 11,946 have been paid by the Tuberculosis Nurses and 942 visits by the Clinical Nurse who attends to domiciliary patients requiring surgical dressings and nursing care.

TABLE 14.—INSURED CASES TREATED IN 1935.

Residential	1,669
Tuberculosis Clinic	121
Domiciliary	2,192
Total	3,982

ANALYSIS OF CASES TREATED.

TABLE 15.—Residential (Insured).

INSTITUTION	Total Cases Treated		Discharged from Institutions		Died	* Residential Treatment discontinued in other cases	Still under Residential Treatment on 1st Jan., 1936
	Males	Females	Improved	Without Improvement			
	(1)		(2)	(3)	(4)	(5)	(6)
			PULMONARY				
Baguley	445	234	173 65	32 48	60 22	33 7	147 92
Crossley	81	147	48 83	9 6	1 1	4 6	19 51
Abergele	59	11	29 6	2 ..	1 1	1 ..	26 4
Barrowmore	47	..	15 ..	1 ..	.. ..	2 ..	29 ..
Withington	362	138	176 66	61 20	95 28	.. 8	30 16
Crumpsall	24	11	2 2	16 5	5 4	.. ..	1 ..
Total Pulmonary	1018	541	665	200	218	61	415
			NON-PULMONARY				
Manchester Royal Infirmary ..	13	19	13 19	....	....	....	....
Skin Hospital	3	..	3..	....	....	....	....
Ancoats Hospital .. .. .	..	..	....	....	....	....	....
Shropshire Orthopædic Hospital	9	5	5 4	.. ..	1 ..	.. ..	3 1
Withington	33	13	16 6	6 2	2 1	2 1	7 3
Crumpsall	10	5	2 1	2 3	6 ..	.. ..	.. 1
Total Non-pulmonary ..	68	42	69	13	10	3	15
TOTAL—ALL FORMS	1086	583	734	213	228	64	430

* The figures in column (5) relate to cases as to the progress of which no definite report is available for various reasons—e.g., the withdrawal from the Institution of the insured persons themselves before the expiration of the period for which they were nominated for the treatment.

TABLE 16.—*Residential (Uninsured).*

INSTITUTION	Total Cases Treated			Discharged from Institutions		Died	* Residential Treatment discontinued in other cases	Still under Residential Treatment on 1st Jan. 1936
	Males	Females	Children	Improved	Without Improvement			
		(1)		(2)	(3)	(4)	(5)	(6)
PULMONARY								
Baguley	117	107	..	41 27 ..	11 28 ..	18 14 ..	7 2 ..	40 36 ..
Crossley	22	35	..	11 23 ..	2 2 ..	.. 1 ..	1 2 ..	8 7 ..
Abergele	30	9	105	15 1 29	3 1 ..	.. .. 2	.. 1 ..	12 6 74
Barrowmore	9	..	..	4 .. ..	.. .. ..	.. .. ..	1	4
Withington	282	273	..	112 132 ..	45 43 ..	80 63 ..	2 10 ..	43 25 ..
Booth Hall .. .. .	..	..	125	.. .. 75	.. .. 10	.. .. 23	.. .. 3	.. .. 14
Crumpsall	21	24	..	.. .. ..	16 15 ..	4 8 ..	.. 1 ..	1
Total Pulmonary	481	448	230	470	176	213	30	270
NON-PULMONARY								
Barrowmore	1	..	..	.. .. ..	.. .. ..	1....	......	......
Abergele .. .. .	..	..	179	.. .. 55	.. .. 1	.. .. 1	.. .. ..	.. .. 122
Manchester Royal Infirmary .. .. .	..	9	7	.. 9 6	.. .. ..	.. .. ..	.. .. ..	.. .. 1
Skin Hospital	2	4	2	2 4 2	......	......	......	......
Ancoats Hospital .. ..	..	1	4	.. 1 4	......	......	......	......
Shropshire Orthopaedic Hospital	3	5	..	2 .. ..	.. 1 ..	.. .. ..	.. .. ..	1 4 ..
Withington	21	16	..	13 3 ..	2 3 ..	1 5 ..	1	4 5 ..
Booth Hall .. .. .	..	..	72	.. .. 40	.. .. 2	.. .. 16	.. .. 6	.. .. 8
Crumpsall	3	13	..	.. 4 ..	1 3 ..	.. 3 ..	.. .. ..	2 3 ..
Total Non-Pulmonary	30	48	264	145	13	27	7	150
Total—ALL FORMS ..	511	496	494	615	189	240	37	420

* The figures in column (5) relate to cases of which no definite report is available for various reasons—e.g., the withdrawal from the Institution of the persons themselves before the expiration of the period for which they were nominated for the treatment.

LIGHT THERAPY.

Artificial light treatment has been continued for those cases that experience has proved benefit by this form of therapy. During the last eight years 349 cases have been under this treatment. Two forms of artificial sunlight are made use of viz., the mercury vapour lamp, which was in use up to the time we moved into the new clinic, and the open arc lamp.

The following table analyses these cases in detail and shows a gain in weight and improvement in many patients. Quiescence was secured in a number of those who completed the necessary course of treatment. It is to be noted that those particularly benefitting are the sufferers from tuberculous adenitis (with or without abscess formation) and those in whom abdominal tuberculosis existed. It must be borne in mind that no figures of the treatment of lupus appear, as these cases are treated by the Manchester Skin Hospital (on behalf of the Corporation) by light therapy, and in the majority of instances with very marked benefit:—

TABLE 17.

Localisation of the Disease	No. of Cases	Sex		Conditions of Cases at the end of Treatment				Weight Record			Average duration of Treat- ment in Months	Treat- ment discon- tinued	Cases still under Treat- ment and not included in table
		M.	F.	Quies- cent	Im- proved	Station- ary	Worse	Gain	Station- ary	Loss			
Tuberculous adenitis with abscess	40	19	21	12	7	3	..	16	4	2	9.15	18	11
Tuberculous adenitis without softening ..	203	97	106	74	31	12	5	89	15	18	12.4	81	27
Tuberculosis of bones, joints, and spine ..	13	10	3	4	1	2	..	6	..	1	17.4	6	2
Tuberculosis of abdomen and tabes mesenterica	33	15	18	11	8	3	..	18	2	2	10.35	11	2
Tuberculosis of bronchial glands	3	3	..	..	2	..	..	2	..	..	9.0	1	1
Tuberculosis of skin ..	5	2	3	..	1	..	..	..	1	..	4.0	4	..
Tuberculosis of kidney ..	5	2	3	..	1	1	..	1	..	1	12.0	3	..
Pre-tuberculous conditions	4	3	1	..	3	..	..	3	..	..	9.0	1	..

The following table summarises the non-pulmonary cases treated at various Institutions :—

TABLE 18.

Tuberculosis of :—

Bones and Joints	..	..	..	..	..	..	..	..	..	285
Glands	..	..	..	..	..	..	..	..	..	59
Genito Urinary Tract	..	..	..	..	..	..	..	..	..	16
Abdomen	..	..	..	..	..	..	..	..	..	57

Skin—

1. Lupus Vulgaris	..	..	..	..	..	..	..	..	..	122
2. Toxi Tuberculids	..	..	..	..	..	..	..	..	..	4
3. Bazins Disease	..	..	..	..	..	..	..	..	..	16
4. Tuberculous Ulceration of Skin	..	..	..	..	..	..	..	..	..	24

TABLE 19.

TABLES SHOWING AFTER HISTORY OF ARRESTED CASES (INSURED).
1925.

No Tubercle Bacilli found.

Tubercle Bacilli found.

Stage	Sex	Number of Cases taken off Register	Number known to be still living at end of 1935	Lost sight of	Died	Sex	Number of Cases taken off Register	Number known to be still living at end of 1935	Lost sight of	Died
I.	M	30	15	14	1	M	19	10	3	6
	F	18	9	9	..	F	6	2	3	1
II.	M	30	13	13	4	M	13	6	4	3
	F	12	7	4	1	F	8	3	3	2
III.	M	7	4	1	2	M	4	1	1	2
	F	5	2	3	..	F	2	..	1	1
	M & F	102	50	44	8	M & F	52	22	15	15

TABLES SHOWING AFTER HISTORY OF ARRESTED CASES (INSURED)—continued
1926.

No Tubercle Bacilli found.

Tubercle Bacilli found.

Stage	Sex	Number of cases taken off Register	Number known to be still living at end of 1935	Lost sight of	Died	Sex	Number of Cases taken off Register	Number known to be still living at end of 1935	Lost sight of	Died
I.	M	29	14	11	4	M	11	5	4	2
	F	22	10	12	..	F	4	2	2	..
II.	M	20	11	4	5	M	10	1	6	3
	F	7	3	4	..	F	2	2	..	..
III.	M	10	5	3	2	M	4	1	..	3
	F	2	2	..	..	F	..	..	..	..
	M & F	90	45	34	11	M & F	31	11	12	8

1927.

I.	M	23	11	9	3	M	6	4	1	1
	F	26	15	8	3	F	1	1	..	..
II.	M	13	9	1	3	M	14	9	5	..
	F	7	4	2	1	F	5	3	..	2
III.	M	6	4	1	1	M	3	3	..	..
	F	1	1	..	..	F	1	..	1	..
	M & F	76	44	21	11	M & F	30	20	7	3

1928

I.	M	34	24	5	5	M	10	3	4	3
	F	28	17	10	1	F	6	3	2	1
II.	M	27	16	6	5	M	7	3	2	2
	F	15	8	6	1	F	2	1	..	1
III.	M	12	10	2	..	M	3	2	..	1
	F	3	2	..	1	F	3	2	..	1
	M & F	119	77	29	13	M & F	31	14	8	9

TABLES SHOWING AFTER HISTORY OF ARRESTED CASES (INSURED)—continued
1929.

No Tubercle Bacilli found.

Tubercle Bacilli found.

Stage	Sex	Number of Cases taken off Register	Number known to be still living at end of 1935	Lost sight of	Died	Sex	Number of Cases taken off Register	Number known to be still living at end of 1935	Lost sight of	Died
I.	M	34	21	9	4	M	8	6	..	2
	F	37	24	11	2	F	4	4	..	..
II.	M	24	16	4	4	M	9	3	3	3
	F	13	11	2	..	F	5	4	1	..
III.	M	9	5	3	1	M	5	2	1	2
	F	4	3	..	1	F	..	..	..	..
	M & F	121	80	29	12	M & F	31	19	5	7

1930.

I.	M	80	50	16	14	M	24	21	1	2
	F	45	31	12	2	F	4	3	1	..
II.	M	44	29	6	9	M	24	12	4	8
	F	21	16	5	..	F	14	11	1	2
III.	M	15	10	1	4	M	4	3	1	..
	F	7	6	..	1	F	2	..	1	1
	M & F	212	142	40	30	M & F	72	50	9	13

1931.

I.	M	77	55	11	11	M	25	20	4	1
	F	57	38	13	6	F	5	4	1	..
II.	M	48	31	8	9	M	29	19	3	7
	F	14	11	3	..	F	7	6	..	1
III.	M	9	8	1	..	M	5	4	1	..
	F	2	1	..	1	F	1	1	..	..
	M & F	207	144	36	27	M & F	72	54	9	9

TABLE SHOWING AFTER HISTORY OF ARRESTED CASES (INSURED)—continued
1932.

No Tubercle Bacilli found.

Tubercle Bacilli found.

Stage	Sex	Number of Cases taken off Register	Number known to be still living at end of 1933	Lost sight of	Died	Sex	Number of Cases taken off Register	Number known to be still living at end of 1933	Lost sight of	Died
I.	M	46	34	8	4	M	21	15	4	2
	F	53	38	13	2	F	16	10	6	..
II.	M	30	18	10	2	M	15	14	..	1
	F	22	18	3	1	F	9	8	..	1
III.	M	9	8	1	..	M	3	3	..	..
	F	4	2	..	2	F	2	2	..	..
M & F		164	118	35	11	M & F	66	52	10	4

1933.

I.	M	35	31	2	2	M	10	8	1	1
	F	23	10	4	..	F	5	2	2	1
II.	M	22	18	3	1	M	15	13	1	1
	F	15	8	5	2	F	5	4	1	..
III.	M	4	4	..	..	M	4	4	..	..
	F	2	2	..	..	F	..	..	..	..
M & F		101	82	14	5	M & F	30	31	5	3

1934.

I.	M	35	32	3	..	M	14	13	1	..
	F	28	26	2	..	F	3	3	..	..
II.	M	14	14	..	..	M	9	8	..	1
	F	18	13	3	2	F	3	3	..	..
III.	M	..	..	..	..	M	2	2	..	..
	F	1	1	..	..	F	..	..	..	..
M & F		96	86	8	2	M & F	31	29	1	1

CROSSLEY AND BAGULEY SANATORIA.

Conditions relative to patients treated in the Crossley Sanatorium and Baguley Sanatorium during the last ten years are set forth in the following tables ; Baguley Sanatorium is in the main an institution for advanced cases.

Many of these patients improve under treatment and are subsequently transferred to Delamere or Abergele. In like manner observation cases in Baguley are sent to the other sanatoria when suitable for this form of care.

The earlier the stage of the disease at which a patient can be given sanatorium treatment the greater the prospect of permanent arrest. Properly selected cases have their best chance of arrest in the shortest time by intelligently carried-out sanatorium treatment ; moreover, they learn restraint, discipline, and an ordered way of life, which are essential for maintenance of health and to prevent relapses.

TABLE 20.

CROSSLEY SANATORIUM.

Males.

Year	No. of new cases	Position at the end of 1935				No. of Re-admissions These are additional to the cases in Column 2 and are given to show the number of beds occupied
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1926 ..	107	36	..	58	13	44
1927 ..	112	45	..	51	16	39
1928 ..	122	51	..	55	16	27
1929 ..	97	50	..	43	4	53
1930 ..	88	55	..	26	7	35
1931 ..	84	45	..	26	13	23
1932 ..	38	23	..	11	4	26
1933 ..	52	30	1	17	4	22
1934 ..	43	37	..	4	2	12
1935 ..	72	67	1	4	..	14
Total ..	815	439	2	295	79	295

Females.

Year	No. of new cases	Position at the end of 1935				No. of Re-admissions These are additional to the cases in Column 2 and are given to show the number of beds occupied
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1926 ..	127	46	..	54	27	32
1927 ..	140	60	..	52	28	24
1928 ..	126	51	..	55	20	33
1929 ..	139	63	..	49	27	22
1930 ..	137	86	2	34	15	41
1931 ..	136	80	1	36	19	49
1932 ..	135	88	..	31	16	54
1933 ..	130	77	2	24	27	37
1934 ..	95	77	2	10	6	32
1935 ..	98	96	1	1	..	32
Total ..	1263	724	8	346	185	356

TABLE 21.
BAGULEY SANATORIUM.
Males.

Year	No. of new cases	Position at the end of 1935				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	These are additional to the cases in Column 2 and are given to show the number of beds occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1926 ..	297	43	105	115	34	78
1927 ..	307	73	101	111	22	84
1928 ..	361	73	114	149	25	88
1929 ..	355	79	127	127	22	83
1930 ..	297	66	115	107	9	83
1931 ..	264	97	85	71	11	87
1932 ..	263	100	79	75	9	81
1933 ..	285	138	72	71	4	67
1934 ..	297	172	73	50	2	96
1935 ..	250	195	31	19	5	118
Total ..	2976	1036	902	895	143	865

TABLE 2I—*continued.*

BAGULEY SANATORIUM.

Females.

Year	No. of new cases	Position at the end of 1935				No. of Re-admissions
		Known to be still living	Died in the Sanatorium	Died elsewhere	Lost sight of	These are additional to the cases in Column 2 and are given to show the number of beds occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1926 ..	216	31	81	80	24	48
1927 ..	185	26	59	82	18	50
1928 ..	168	45	59	55	9	38
1929 ..	207	54	81	60	12	59
1930 ..	182	37	81	64	..	27
1931 ..	146	46	50	47	3	28
1932 ..	157	66	53	34	4	21
1933 ..	162	85	38	35	4	33
1934 ..	184	108	31	35	10	56
1935 ..	177	154	12	11	..	31
Total ..	1784	652	545	503	84	391

HOSPITALS ADMINISTRATION

including :—

HOSPITALS.

INSTITUTIONS.

SPECIAL ESTABLISHMENTS.

CONVALESCENT HOMES.

DOMICILIARY MEDICAL SERVICE.

PUBLIC VACCINATION.

DETAILS OF
BED PROVISION AND STAFFING AT HOSPITALS
AND INSTITUTIONS, 1935

	GENERAL HOSPITALS			SPECIAL ESTABLISHMENTS			INSTITUTIONS		TOTALS
	Crumpsall Hospital	Withington Hospital	Booth Hall Hospital	Rose Hill Convalescent Home	Langho Colony	Swinton Home	Crumpsall Institution (Mental Wards)	Withington Institution (Aged and Infirm Wards)	
1. Number of Resident Medical Staff	9	10	6	..	1	..	..	..	26
2. Number of visiting staff ..	11	14	10	1	..	1	..	..	37
3. Specialist services supplied*	A, B, C, D, E, F, G, H, I, J, K, M	A, B, C, D, E, F, G, H, I, J, K, L, M	A, D, E, F, G, H, I, J, K, L	..	..	..	..	..	..
4. Number of									
(a) Trained nurses	113	128	50	4	2	3	..	4	304
(b) Probationer nurses ..	166	168	98	..	..	..	..	..	432
(c) Assistant nurses	51	12	13	..	..	..	..	..	76
(d) Male attendants	11	6	..	..	30	..	..	..	47
(e) Attendant nurses .. ..	..	..	20	13	31	..	..	51	115
(f) Superintendents .. ..	..	..	..	..	..	..	3	..	3
(g) AssistantSuperintendents	..	..	..	..	..	..	3	..	3
(h) Charge attendants .. ..	..	..	..	..	..	2	11	..	13
(i) Mental nurses .. ..	..	..	..	..	..	..	49	..	49
(j) Mental attendants .. ..	..	..	..	..	..	21	45	..	66
(k) Instructress .. ..	..	..	..	..	..	..	1	..	1
TOTAL	341	314	181	17	63	26	112	55	1,109
5. Total number of beds provided for sick and maternity cases at 31st December, 1935—									
(a) For men	677	497	..	..	287	..	356	281	2,098
(b) For women	723	679	..	..	331	..	310	213	2,256
(c) For children (under 16 years of age), excluding cots in maternity wards†..	40	11	760	123	..	130	..	..	1,064
TOTAL	1,440	1,187	760	123	618	130	666	494	5,418

* Specialist services supplied—

A Surgeon	F Aurist and Laryngologist	K Dentist
B Physician	G Children's Specialist	L Tuberculosis Specialist
C Gynæcologist and Obstetrician	H Pathologist	M Radium Therapist
D Ophthalmic Surgeon	I Dermatologist	
E Orthopædic Surgeon	J Radiologist	

† The inclusion of cots in maternity wards would increase the total number of beds in Crumpsall and Withington Hospitals by 82 and 91 respectively.

HOSPITALS AND INSTITUTIONS.

General Statistics for the Year ended 31st December, 1935

IN-PATIENTS	GENERAL HOSPITALS			SPECIAL ESTABLISHMENTS			INSTITUTIONS		TOTALS
	Crumpsall Hospital	Withington Hospital	Booth Hall Hospital	Rose Hill Convalescent Home	Langho Colony	Swinton Home	Crumpsall Institution (Mental Wards)	Withington Institution (Aged and Infirm Wards)	
1. Total number of admissions (including infants born in hospital)	11,671	14,228	5,285	776	68	39	1,011	578	33,656
2. Number of women confined in hospital	1,845	2,116	..	..	..	..	..	..	3,961
3. Number of live births ..	1,729	2,045	..	..	..	..	..	..	3,774
4. Number of still-births ..	117	89	..	..	..	..	..	..	206
5. Number of deaths among the newly-born (<i>i.e.</i> , under four weeks of age)*	51	49	..	..	..	..	..	..	100
6. Total number of deaths among children under one year (including those given under 5)	63	49	182	..	..	..	..	..	294
7. Number of maternal deaths among women confined in hospital	9	6	..	..	..	..	..	..	15
8. Total number of deaths ..	1,251	1,737	374	..	22	3	274	132	3,793
9. Total number of discharges (including infants born in hospital)	10,158	12,457	4,988	784	51	61	727	364	29,590
0. Duration of stay of patients included in 8 and 9 above—									
(a) Four weeks or less..	8,719	10,920	3,562	337	6	5	640	30	24,219
(b) Exceeding four but under thirteen weeks	2,251	2,632	1,366	343	21	..	173	114	6,900
(c) Exceeding thirteen weeks	439	642	434	104	46	59	188	352	2,264
1. Number of beds occupied—									
(a) Average during the year	1,163	1,071	487	99	621	130	665	422	4,658
(b) Highest	1,277 on 25-1-35	1,144 on 22-2-35	587 on 31-12-35	138 on 15-3-35	628 on 26-3-35	137 on 8-1-35	693 on 7-10-35	446 on 28-10-35	..
(c) Lowest	1,052 on 20-7-35	980 on 27-7-35	402 on 28-7-35	65 on 31-10-35	610 on 17-11-35	112 on 31-12-35	626 on 14-6-35	354 on 6-1-35	..
2. Number of surgical operations under general anæsthetic (excluding dental operations)..	1,088	1,400	1,753	..	..	..	..	..	4,241
3. Number of abdominal sections	583	634	122	..	..	..	..	..	1,339

* This figure relates only to children born in hospital.

† Relates to women discharged from or dying in hospital during the year.

HOSPITALS AND INSTITUTIONS.

Introductory.

The year 1935 was marked by three events of far-reaching importance, in so far as the treatment of Manchester's sick is concerned. These three events in chronological order of occurrence were :—

1. The approval by the City Council of a scheme for reorganising the consultant medical and surgical services of the municipal general hospitals.
2. The formation of the Manchester Joint Hospitals Advisory Board.
3. The approval by the City Council of a scheme for reorganising the domiciliary medical service of the City on panel lines.

Apart from these major events, the work of the municipal hospitals in 1935 continued to develop in conformity with the settled policy of the Public Health Committee since the transfer of functions in 1930. The increase in the public acceptance of the transferred hospitals referred to in last year's report continues, especially in the case of Withington Hospital. Naturally this growing popularity makes it essential that a steady improvement in the provision made (both in relation to accommodation and equipment) shall be maintained, as otherwise the service would not be able to keep pace with the demands made upon it.

Accommodation.

The accommodation provided at the general hospitals has not been basically increased, *i.e.*, no new hospitals or new wings have been added. Administrative action has, however, resulted in additional beds being made available for hospital purposes at Withington by the conversion of certain blocks in the Institution for occupation by sick persons.

Owing to the decrease in the numbers of healthy and only slightly infirm persons admitted to the Institution many beds have become vacant. The Institution contains in total 1,200 beds, but it had never accommodated more than 800 inmates at any one time since its transfer to the local authority in 1930. There was thus a balance of 400 unoccupied beds. The accommodation was of so good and modern a type that it was clear that little difficulty would be experienced in converting some of it for occupation by sick persons.

By rearrangement of the occupation of the various blocks it was found possible to empty two of them. These were renovated and adapted for nursing purposes and to them have been transferred chronic sick from the hospital. The accommodation at the disposal of the hospital for acute cases has thus been enlarged by 225 beds.

One of the blocks referred to (“ H ”) was in use during the whole of 1935. It contains 125 beds and its occupancy was generally very close to the maximum. It is occupied by male patients (including post- encephalitics).

The other converted block (“ E ”) contains 100 beds for female patients, but this block has only been in commission for a few weeks at the time of writing this report. Further conversions will be undertaken as required to keep pace with the steady increase in the user of Withington Hospital by the general public.

The Public Assistance Committee have by resolution agreed to the conversions already effected and arrangements have been made for the Public Health Committee to be debited with the cost of maintaining the hospital cases accommodated in the converted blocks.

The need for action of this kind is of great evidential value in assessing the development of the City general hospitals as “ acute ” units since the transfer of 1930. The following table, showing the gradual reduction of the length of stay of patients in these hospitals during the past five years, is especially interesting in that it provides real proof of the statement which has been made in previous Annual Reports that the work of the hospitals is rapidly changing in character :—

TABLE I.
“ LENGTH OF STAY ” OF PATIENTS IN MUNICIPAL GENERAL HOSPITALS
DURING THE LAST FIVE YEARS.

YEAR	ROOTH HALL			CRUMPSALL			WITHINGTON		
	Under 4 weeks	4 to 13 weeks	Over 13 weeks	Under 4 weeks	4 to 13 weeks	Over 13 weeks	Under 4 weeks	4 to 13 weeks	Over 13 weeks
1931	2,883	1,508	532	8,020	2,303	663	8,268	2,616	1,099
1932	3,210	1,621	574	7,973	2,771	871	8,557	2,772	724
1933	3,027	1,426	491	9,658	1,855	856	9,183	2,954	796
1934	2,990	1,388	501	8,958	2,110	501	10,712	2,442	589
1935	3,562	1,366	434	8,719	2,251	439	10,920	2,632	642

It will be observed that at each hospital the number of “ short stay ” cases has increased during the period reviewed and that the number of “ long stay ” cases has decreased. This is especially notable in the returns from Withington Hospital.

Consultant Services.

On September 4th, 1935, the Council approved a report on the consultant services of the hospitals. The organisation and strength of the consultant medical and surgical staffs at the general hospitals has been the subject of consideration ever since the transfer of the hospitals to the City authority in 1930. Frequently during the intervening years the attention of the Public Health Committee had been directed to issues both of detail and of organisation, which showed clearly that the only method by which the deficiencies and anomalies existing could be removed lay in a comprehensive reorganisation of the service.

The report submitted to the City Council reviewed the existing position in general terms and contained various tables illustrative of the changing character of the work done at the hospitals. While it is not practicable to reprint all the information given in the report, the following tables have been extracted as being of special interest :—

TABLE II.
ADMISSIONS AND CONFINEMENTS IN THE GENERAL HOSPITALS,
1930-1934.

Hospital	Year	No. of Admissions	No. of Women Confined in Hospital
Crumpsall	*1930	8,395	1,706
	1931	11,003	1,676
	1932	11,474	2,038
	1933	12,040	1,794
	1934	11,731	1,863
Withington	*1930	7,024	1,008
	1931	11,970	1,370
	1932	12,068	1,594
	1933	13,081	1,692
	1934	13,584	1,934
Booth Hall	*1930	3,274	—
	1931	4,993	—
	1932	5,347	—
	1933	4,919	—
	1934	4,809	—

* Nine months only—Transfer effected on 1st April, 1930.

NOTE.—In considering the admission figures for Booth Hall, it is to be borne in mind that since 1932 a reduction of 500 admissions per annum has been effected by restriction of the admission of notifiable infectious disease to this hospital. The maintenance of the figures of admission shown, therefore, indicates an increase of approximately 500 cases per annum of general cases of acute illness.

TABLE III.
PROPORTION OF ACUTE CONDITIONS TREATED IN 1934,
AS AGAINST 1931.

Hospital	Year	No. of Patients whose stay in Hospital was less than 4 weeks	No. of Patients whose stay in Hospital was between 4 and 13 weeks	No. of Patients whose stay in Hospital exceeded 13 weeks
Crumpsall	1931	8,020	2,303	663
	1934	8,958	2,110	501
Withington	1931	8,268	2,616	1,099
	1934	10,712	2,442	589
Booth Hall	1931	2,883	1,508	532
	1934	2,990	1,388	501

It will be observed that the signs of rapid and increasing growth of acute work are plainest in the case of Withington, but there are certain factors which make the tables given above rather less impressive than they in fact are, notable among which are the following examples of administrative action during the period :—

- (a) The transfer of certain chronically sick cases from hospital to institution beds to make available more beds for acute hospital work. In Withington this policy has been adopted continuously.
- (b) The transfer of certain old age-pensioners from Crumpsall Hospital to Withington Institution. This measure has liberated beds when they were most urgently required, *i.e.*, in the peak periods.

CRUMPSALL, WITHINGTON, AND BOOTH HALL HOSPITALS—NUMBER OF CASES DEALT WITH IN SELECTED YEARS

TABLE IV.

OF CERTAIN GROUPS OF DISEASES.

Hospital	Year	Malignant Disease	Acute and Sub-acute Rheumatism and Chorea	Diseases and Accidents of Pregnancy and Child-birth	Nervous System and Sense Organs	Circulatory System	Digestive System	Genito-Urinary System	Skin
Crumpsall	1931	138	55	400	346	442	695	357	1,093
	1934	156	147	575	621	666	1,127	505	727
Withington	1931	388	94	441	353	776	672	382	272
	1934	471	187	934	706	871	1,327	694	679
Booth Hall	1931	632*	225	198	163	43	354	81	281
	1934	130*	324	390	279	139	356	116	561

* This illustrates the point already mentioned concerning control of the admission of infections to Booth Hall Hospital, and at the same time increases the significance of the total admission figures for the years 1933 and 1934.

** Includes scalds and other accidents of children at home. These cases are reaching Booth Hall in far greater numbers than was the case five years ago.

The report also directed attention to three cardinal defects in the existing organisation. These were :—

1. Patients only received specialist attention if, in the judgment of the resident medical officer in charge of the case, consultation with a specialist officer was necessary. It is in no sense a criticism of the resident staffs to say that this was the chief defect of the old system.

2. The number of specialists employed and the number of visits paid by them to the hospitals were quite inadequate to cope with the volume of work illustrated by the tables submitted.

3. The terms of service of the specialists employed were unsatisfactory to all concerned, containing, as they did, numerous anomalies in relation to salary, frequency of visits, responsibility for deputies, etc.

The recommendations embodied in the report were based upon the following fundamental principles and requirements :—

1. That the increased volume of work necessitated a numerical strengthening of the consultant staffs.

2. That increased frequency of visitation by consultants was the only positive guarantee of a continuous highly skilled observation of the progress of any patient.

3. That efficiency demanded that all acutely ill cases in hospital should be in the *personal charge* of the consultant staff.

4. That the terms of service between the consultants and the local authority should be acceptable to both parties after full discussion.

5. That the reorganisation should be so planned as to allow for the closest collaboration with the work of the voluntary hospitals in the City.

The following schedule shows the details of the reorganisation as approved by the City Council :—

TABLE V.
REORGANISATION OF CONSULTANT SERVICES AT GENERAL HOSPITALS.
SCHEDULE SHOWING EXISTING PROVISION AND NEW SCHEME.

	Wards	Beds	Existing Provision		New Scheme	
			Visiting Specialists	Number of visits weekly	Visiting Specialists	Number of visits weekly
MEDICINE—						
Crumpsall	19	548	1	2	3	2 ea
Withington	18	619	1	2	3	2
Booth Hall	8	400	1	2	3	2
SURGERY—						
Crumpsall	8	284	1	2	3	2 ea
Withington	6	134	1	2	3	2
Booth Hall	4	160	1	1	1	2
GYNÆCOLOGY AND OBSTETRICS—						
Crumpsall	7	141	1	2	3	2 ea
Withington	7	168	1	2	3	2
ORTHOPÆDICS—						
Crumpsall	2	48	1	1	1	2
Withington	2	62	1	1	1	2
Booth Hall	Included in "Surgery."		1	1	1	2
DISEASES OF THE EYE—						
Crumpsall	No wards specifically allocated to eye work, but usually about 12 eye cases in each hospital at any one time.		1	$\frac{1}{3}$	1	1
Withington			1	$\frac{1}{3}$	1	1
Booth Hall			1	$\frac{1}{3}$	1	1
DISEASES OF THE EAR, NOSE, AND THROAT—						
Crumpsall	No wards specifically allocated. Usually 10 or 12 cases in each hospital.		1	1	1	2
Withington			1	2	1	2
Booth Hall			1	1	1	2
DISEASE OF THE SKIN—						
Crumpsall	2	26	1	$\frac{1}{3}$	1	1
Withington	2	40	1	$\frac{1}{3}$	1	1
Booth Hall	No allocation. Approx. 30 beds.		1	$\frac{1}{2}$	1	1
VENEREAL DISEASE—						
Crumpsall	2	54	—	—	1	1
					One visit weekly required. To be part of duties of Skin Specialist appointed for Crumpsall and Booth Hall	
RADIOLOGY—						
Crumpsall	2,644 examinations—1934.		1	4	1	4
Withington	3,166	" "	1	4	2	{4 2
Booth Hall	2,725	" "	1	1	1	2
DENTISTRY—						
Crumpsall	It has been frequently represented by the Dentists that the present sessions are insufficient.		1	1	1	2
Withington			1	1	1	2
Booth Hall			1	3	1	4
ANÆSTHESIA—						
Crumpsall	No provision for administration of anæsthetics by specialists is made at any of these hospitals—excepting in connection with the special tonsils and adenoids work at Booth Hall and the radium treatment of cancer at Crumpsall and Withington, neither of which is in any way related to this general scheme.				2	2 ea
Withington					3	2
Booth Hall					1	2

It was agreed that the actual implementation of the new scheme should be carried out in consultation with the body representing the voluntary hospitals of the City set up under Section 13 of the Local Government Act of 1929. During the current year (1936) this reorganisation has been implemented, and a full report of the procedure adopted and the appointments made will be given in the Annual Report for 1936.

Manchester Joint Hospitals Advisory Board.

As stated in the last Annual Report, a joint committee to function under the provisions of Section 13 of the Local Government Act, 1929, and to act for general purposes of co-ordination and co-operation in the hospital work of the City was set up by the Public Health Committee and by the governing bodies of the voluntary hospitals of the City (acting in association with each other) very soon after the transfer of the former poor-law hospitals to the local authority in 1930. Unfortunately, it was not found practicable to give any real effect to this action until the beginning of 1935.

In March, 1935, a conference between representatives of the Corporation and representatives of the voluntary hospitals was held in the Town Hall, at which was considered a memorandum prepared by the Medical Officer of Health on the general principles upon which a rational scheme of co-operation should be founded.

The memorandum said that a fundamental requirement of any scheme of co-operation was that there should be a spirit of mutual and practically unreserved agreement between the parties, but that co-operation should not be so interpreted as to destroy the spirit of enterprise and development on the part of individuals and single hospitals. The relevant section of the Act of 1929 required the City Council to consult a committee representing the voluntary hospitals when making provision for hospitals as to the accommodation to be provided and as to the purpose for which it is to be used. This, said the memorandum, was a fairly wide phrasing, but it had been interpreted legally to mean only extension of hospital provision.

It was suggested that it would be better to view the issue of "hospital provision" in a much broader sense, and to realise that if effective co-operation were to be attained, practical developments of hospital work, provision of new hospital accommodation, additions to existing hospital accommodation, any considerable re-arrangements of work or staffing, etc., were all matters which might well be the subject of consultation, not only from the City side, but also from the side of the voluntary hospitals. Acceptance of this view obviously portended the formation of a joint board or committee acting in an advisory capacity and consulted by voluntary and city hospitals alike, and the memorandum concluded by proposing the formation of a standing joint hospital board to which every hospital authority in the area should refer when major actions were in contemplation.

The conference approved the memorandum.

In June, 1935, the matter was taken a stage further by the submission of the memorandum to the Public Health Committee and to the consultative committee of the voluntary hospital boards.

Both of these bodies approved the proposal and appointed representatives to discuss the actual organisation of the proposed new board.

The details of the constitution of the board were settled during the next three months and the Board held its first meeting on October 28th, 1935.

The Board consists of ten members of the Public Health Committee of the Corporation and the Medical Officer of Health, together with eight members of the consultative committee of the voluntary hospitals and five members representing the Victoria University of Manchester.

The functions of the Board are of an advisory nature. The Board is empowered and required to advise each and every hospital authority controlled by or associated with the constituent bodies ; such bodies accepting as a fundamental principle that the Joint Board shall be consulted when major issues are involved in any proposed action.

The formation of the Board received very wide publicity, both in professional and in lay and other circles. Great interest has been shown and many enquiries have been received as to the constitution and functions of the Board, inasmuch as it is recognised to be a unique effort to solve the problem of co-operation between civic and voluntary hospital authorities.

“ Rationing ” of Expenditure.

During the year the Council considered a report on the forecasts of expenditure for five years for various civic departments. The forecast submitted by the Public Health Committee was, insofar as hospitals and institutions are concerned, based upon the current expenditure of the year under review, and it was upon this forecast that the final rationing of the expenditure of the Committee was based. It is desirable that some reference should be made to the extreme difficulty of foreseeing the extent to which public demand for hospital accommodation and treatment will develop over what is a fairly long period of time in the early life of the hospitals transferred to the City Council. The growth of the work in these hospitals is indicated in other pages of this report, and there seems to be no indication that this increase will slacken. To maintain hospitals in such a state of efficiency as will enable them to keep pace with the growth and development of modern knowledge and practice in scientific and clinical medicine is always difficult, but the difficulties are greatly

increased when expenditure is restricted. No criticism of the principle of rationing is implied. It appears desirable, however, that some record should be made of the amount of work which has been devoted to the improvement of the hospital services, not only by the Committee but by the departmental officers concerned under these exceptional circumstances. The outstanding expedient adopted to provide more hospital beds with a minimum outlay is to be found in the conversion of certain blocks at Withington Institution to the nursing and care of the chronic sick. The only alternative would have been to extend the hospital by building new pavilions, an expenditure which has been averted by the action taken.

Hospital Statistics.

The method now adopted of obtaining statistics of the work done by the general hospitals was detailed in the Annual Report for 1933.

During the year 1935, 30,965 patients were discharged from or died in the general hospitals. This is the highest figure recorded since the hospitals came under the control of the Corporation, as is shown by the following table :—

TABLE VI.

TABLE SHOWING ADMISSIONS, DISCHARGES, AND DEATHS IN THE
GENERAL HOSPITALS FOR THE FIVE YEARS 1931–1935.

Hospital	Year	Admissions	Discharges	Deaths
Booth Hall	1931	4,993	4,436	487
	1932	5,347	4,913	492
	1933	4,919	4,602	342
	1934	4,809	4,548	331
	1935	5,285	4,988	374
Crumpsall	1931	11,003	9,863	1,123
	1932	11,474	10,479	1,136
	1933	12,040	11,140	1,229
	1934	11,731	10,514	1,055
	1935	11,671	10,158	1,251
Withington	1931	11,970	10,249	1,734
	1932	12,068	10,437	1,616
	1933	13,081	11,282	1,651
	1934	13,584	12,128	1,615
	1935	14,228	12,457	1,737
Totals	1931	27,966	24,548	3,344
	1932	28,889	25,829	3,244
	1933	30,040	27,024	3,222
	1934	30,124	27,190	3,001
	1935	31,184	27,603	3,362

The rapid advance of Withington Hospital is perhaps the most striking feature of this table.

Unfortunately, figures showing the average duration of stay in hospital are not available for the years 1931, 1932, 1933, or 1934, but the figures for 1935 are subjoined :—

Hospital	Average duration of stay of patients discharged from or dying in hospital
	1935—Days
Booth Hall	24·23
Crumpsall	31·22
Withington	32·30

The total number of days' maintenance and the average duration of stay for all three hospitals is as follows :—

	Total days' maintenance of patients discharged from or dying in hospital	Average duration of stay
1935	944,610	30·51

Table IX. at the end of this report is in the same form as last year, with the usual summary appended. Table XVII. also appeared last year.

The new tables included this year are :—

Tables X., XI., and XII.—Showing an analysis of discharges and deaths (by diseases) into age-groups for each hospital, with summaries.

Tables XIII., XIV., and XV.—Showing an analysis of discharges and deaths (by diseases) according to the wards of the City from which the patients were admitted, for each hospital, with summaries.

Table XVI.—Showing patient-days and average stay according to disease groups for each hospital.

The tables indicate the volume and nature of the sickness with which these hospitals deal, and it is intended to present them annually in the future.

City Ward Tables.

Interest in Tables XIII., XIV., and XV. (showing the wards of the City from which patients have been admitted) will naturally be local rather than general, but their inclusion is warranted by the fact that to those having a knowledge of local conditions and topography some valuable comparative figures are now available. Comment on the facts revealed can only be tentative and limited when it is remembered that there is no corresponding information for preceding years. No conclusions as to the actual incidence of illness requiring hospital admission in the various wards can properly be drawn from these figures since corresponding returns for voluntary hospitals are not available. The following analysis, in which the admissions are shown according to wards in descending order of frequency, is, however, worthy of notice :—

ANALYSIS OF PATIENTS DISCHARGED FROM OR DYING IN THE
GENERAL HOSPITALS IN 1935 ACCORDING TO WARDS OF THE CITY.
(See also Tables XIII., XIV., and XV.)

City Ward	Estimated Population	TOTALS			TOTAL	Rate per 1,000 of Population
		Booth Hall	Crumpsall	Withington		
St. Luke's	26,377	292	43	1,060	1,395	52·88
New Cross	25,562	249	993	77	1,319	51·60
All Saints	21,736	225	43	867	1,135	52·22
Ardwick	24,119	265	43	782	1,090	45·19
St. George's	25,079	228	37	821	1,086	43·30
St. Michael's	18,486	178	771	63	1,012	54·74
Wythenshawe	30,907	192	10	778	980	31·71
Medlock Street	22,903	221	16	742	979	42·75
Collegiate Church	16,102	201	726	32	959	59·56
Dollyhurst	19,945	206	689	37	932	46·73
Miles Platting	23,433	208	647	46	901	38·45
Withington	50,618	128	20	751	899	17·76
Bradford	27,067	168	640	49	857	31·66
Beswick	27,067	176	485	166	827	30·55
Moss Side East	19,249	159	20	571	750	38·96
Harpurhey	20,669	132	558	36	726	35·12
St. Mark's	22,170	152	27	542	721	32·52
Openshaw	22,359	153	39	523	715	31·97
Newton Heath	20,717	134	550	23	707	34·12
Chorlton-cum-Hardy	47,418	92	17	581	690	14·55
Gorton South	29,786	143	15	511	669	22·46
Moss Side West	19,686	109	11	511	631	32·05
Moston	25,936	139	438	20	597	23·02
Didsbury	27,915	103	9	479	591	21·17
Cheetham	23,809	84	479	26	589	24·74
Blackley	21,144	145	343	20	508	24·03
Gorton North	21,293	87	13	379	479	22·50
Levenshulme	19,942	77	17	371	465	23·32
Rusholme	22,516	67	8	379	454	20·16
Crumpsall	16,927	80	340	22	442	26·11
Longsight	23,444	71	13	347	431	18·38
St. Clement's	6,033	72	162	25	259	42·93
St. John's	4,444	41	143	31	215	48·38
Oxford	644	6	92	23	121	187·89
Exchange	301	3	11	3	17	56·48
St. Ann's	225	4	4	—	8	35·56
Outside the City	—	184	563	236	983	—
No settled abode	—	5	336	76	417	—
*Others	—	183	2,038	2,188	4,409	—

** "Others" includes:—

(a) Births (totalling 3,774).

(b) Staff cases.

(c) Cases in which the patient's address has not been obtainable.

Some notes on other facts revealed by the tables are subjoined.

Infectious Disease.

Infectious disease accounted for 6.53 per cent. of the discharges and deaths in the three general hospitals, made up as follows : tuberculosis 3.51 per cent. ; venereal disease 0.85 per cent. ; other infectious disease 2.17 per cent. There were 246 patients in the classification "influenza," as compared with 136 in 1934. There were fewer cases of venereal disease treated. The majority, as is usual, were cases of acquired syphilis.

Cancer, etc.

The number of patients in this group decreased slightly from 773 in 1934 to 766 in 1935. The largest single decrease occurred in cases of intestinal cancer (29) but this was largely offset by an increase in cases of cancer of the thorax (24). None of the remaining classifications varied so markedly.

Rheumatism, etc.

The number of cases in this group decreased from 1,466 in 1934 to 1,406 in 1935. 303 of these patients were under 16 years of age, a percentage of 21.55. The number of choreas was 142, a decrease of 66 on the previous year. Diabetes mellitus rose from 146 in 1934 to 204 in 1935. There was a considerable fall in the number of cases of acute and sub-acute rheumatism (including rheumatic fever), the figures being 460 in 1934 and 360 in 1935, a decrease of 21.75 per cent.

Diseases of Nervous System.

The increase in this group of 181 cases (138 of which were treated at Withington) includes an increase of 73 under the heading "neurasthenia" (357 in 1934, 430 in 1935). It will probably be of interest to watch the frequency of this diagnosis in future years. The increase above referred to represents a percentage increase over 1934 of 20.45.

Diseases of Circulatory System.

The totals under this heading show a fall of 160, from 1,676 in 1934 to 1,516 in 1935. The decrease is equally distributed among the various conditions comprising this group with the exception of increases in "other diseases of heart" (36 per cent. over 1934) and "aneurysm" (13 cases against 6 the previous year).

Diseases of Digestive System.

The rise from 3,960 in 1934 to 4,253 in 1935 is mainly attributable to the increased number of tonsils and adenoids cases in Booth Hall Hospital. By arrangement with the Education Committee school children requiring operative treatment for tonsils and adenoids are dealt with at Booth Hall Hospital instead of at the school clinics as was formerly the practice. The volume of this service is now seen for the first time. Prior to the inauguration of the scheme the number of operations for tonsils and adenoids at Booth Hall Hospital was in the region of 500 to 600. An increase of 44 in the cases of ulcer of stomach and duodenum is noted.

Genito-Urinary System.

An increase in this group from 1,315 in 1934 to 1,391 in 1935 is recorded and is principally attributable to a rise of 92 cases of diseases of the female genital organs. Sixty-nine of the extra cases were treated at Withington.

Diseases of Pregnancy, etc.

The figures under this heading and the general maternity statistics of Crumpsall and Withington are of special interest in that they throw into high relief the very definitely successful work of the two hospitals in a branch of work of special public interest at present.

The following table shows in the clearest manner that the hospitals' results are meritorious in two ways—firstly, they show a lower maternal mortality rate per thousand confinements than that of the country as a whole, and, secondly, they have achieved this result despite the fact they that are called upon to deal with a higher percentage of abnormal confinements than is met with in domiciliary practice.

TABLE VII.

SHOWING NUMBERS OF NORMAL AND ABNORMAL CONFINEMENTS IN
DOMICILIARY MIDWIFERY PRACTICE AND IN HOSPITALS, ETC., 1935.

	Normal	Abnormal	Total	Per cent. of Ab- normalities
*Domiciliary confinements	2,436	450	2,886	15·59
Crumpsall Hospital.. ..	1,333	495	1,828	27·08
Withington Hospital ..	1,713	407	2,120	19·20
*St. Mary's Hospital ..	234	134	368	36·41
*Maternity Homes	254	65	319	20·38

* The figures for domiciliary midwifery are available only for the second half of the year. Particulars of the type of confinement are obtained from the mothers, so that the figures are only approximate. The figures for St. Mary's Hospital and for maternity homes are also for the second half-year only.

NOTE.—For the ascertainment of the foregoing figures the following definitions were used :—

A NORMAL delivery is one in which there is a vertex presentation, straight-forward labour, and a spontaneous delivery.

An ABNORMAL delivery may be any of the following :—

1. Induction.
2. Prematurity.
3. Delayed labour—
 - (a) spontaneous.
 - (b) instrumental.
4. Contracted pelvis.
5. Cæsarian section.
6. Breech, footling, cord, transverse, or face presentation.
7. Placenta prævia, or ante-partum hæmorrhage.
8. Retained placenta.
9. Twins.
10. Toxæmia in mother—
 - (a) albuminuria.
 - (b) hyperemesis.

Maternal Mortality Rates, 1935.

†England and Wales	3·93	per 1,000	
Crumpsall Hospital	4·87	„	{ 3·79
Withington Hospital	2·84	„	{ per 1,000

† Provisional figure based on Registrar General's weekly and quarterly returns.

Senility.

Cases of senility occupy a relatively large number of hospital beds, having regard to the fact that the average duration of stay in these cases is in excess of 10 weeks. In 1935, 552 of such cases were recorded, as compared with 434 in 1934.

Violence, etc.

There was a decrease of 106 cases in this group in 1935, the figures being 1,620 in 1934 and 1,514 in 1935. The most notable of the individual decreases are burns and scalds. Burns were fewer than in 1934 by 22 and scalds by 31. Deaths from scalds numbered 4 as against 9 in 1934.

Included in this group are accidents involving fracture, and the following table of fracture statistics shows that the work of the general hospitals in this respect is considerable, even allowing for the fact that approximately 35 per cent. of their cases have already received treatment in voluntary hospitals :—

TABLE VIII.

SHOWING THE NUMBERS OF "FRACTURE" CASES DISCHARGED FROM OR DYING IN THE CITY GENERAL HOSPITALS DURING THE YEARS 1934 AND 1935

Length of Stay in Hospital	Booth Hall		Crumpsall		Withington	
	1934	1935	1934	1935	1934	1935
Under 28 days.. .. .	19	17	184	164	179	212
29—52 days	31	13	37	40	59	58
Over 52 days	35	32	55	40	73	80
Total	85	71	276	244	311	358
Patients admitted from voluntary hospitals (included above)	63	25	76	74	123	139

Age-Group Tables.

Tables X., XI., and XII., showing the age distribution of patients, are of general interest, and it is obvious that when they have been published for a number of years they will have a special value, in that they will enable a close record to be kept of the fluctuations of different illnesses in relation to incidence during selected life periods.

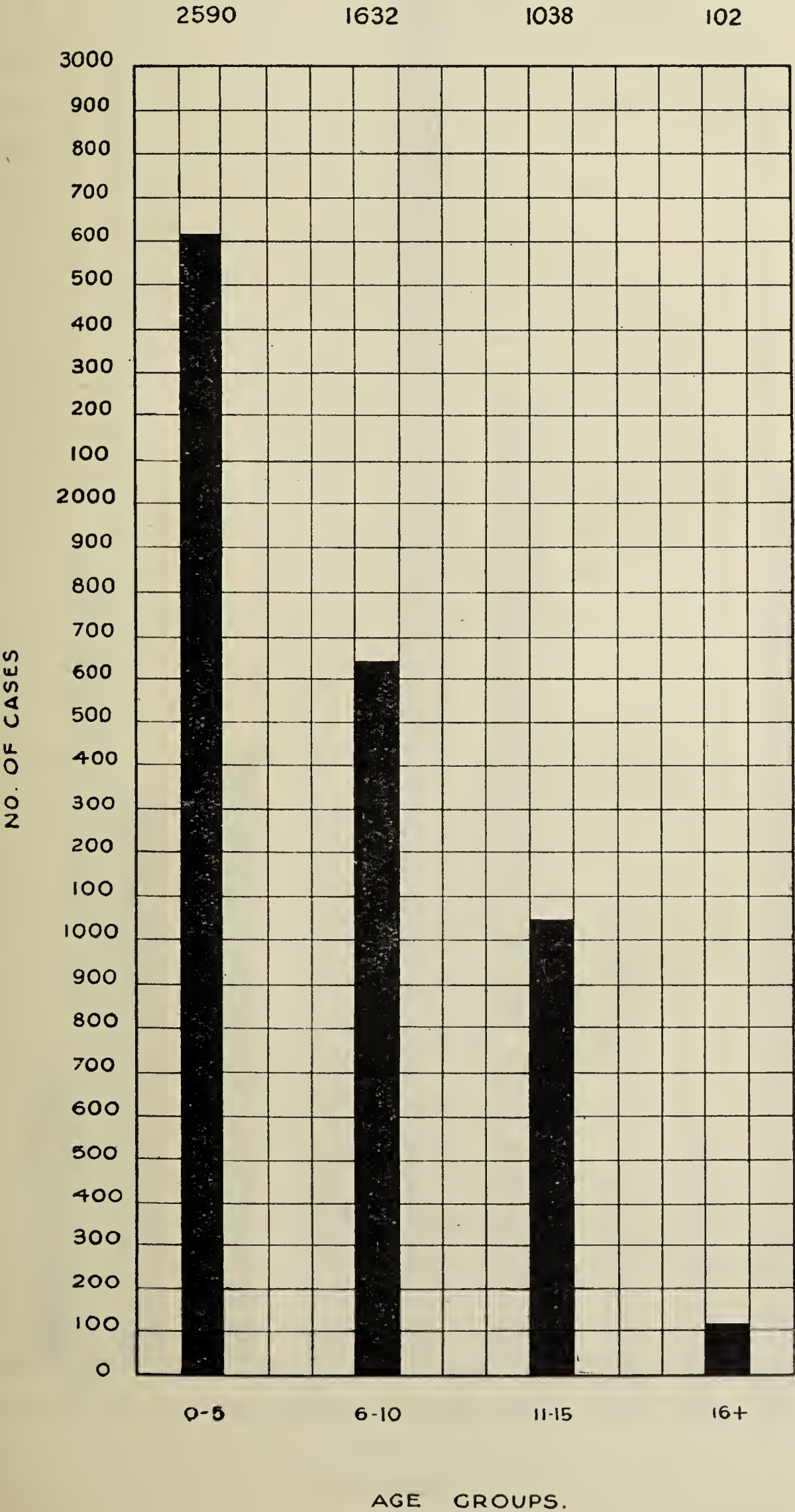
The tables will repay careful study, particularly in the cases of the major incapacitating diseases, but it is only possible to indicate in this report the more obvious features. The following charts show to the general reader the broad distribution of general sickness incidence among selected life periods, but for intensive study recourse must be had to the actual tables.

Charts are also subjoined showing :—

- (1) The case incidence and degree of fatality of the cancer group of diseases in the various life periods. It will be seen that the death figures begin to exceed the discharge figures at the period 51—60, thereafter the proportion of deaths to discharges increases rapidly until, after the eighth decennium, the number of deaths is 8 times the number of discharges.
- (2) A similar chart dealing with diseases of the circulatory system. In this chart is shown the high incidence at the period 61—70. The preponderance of deaths over discharges does not begin until after the age of 70.

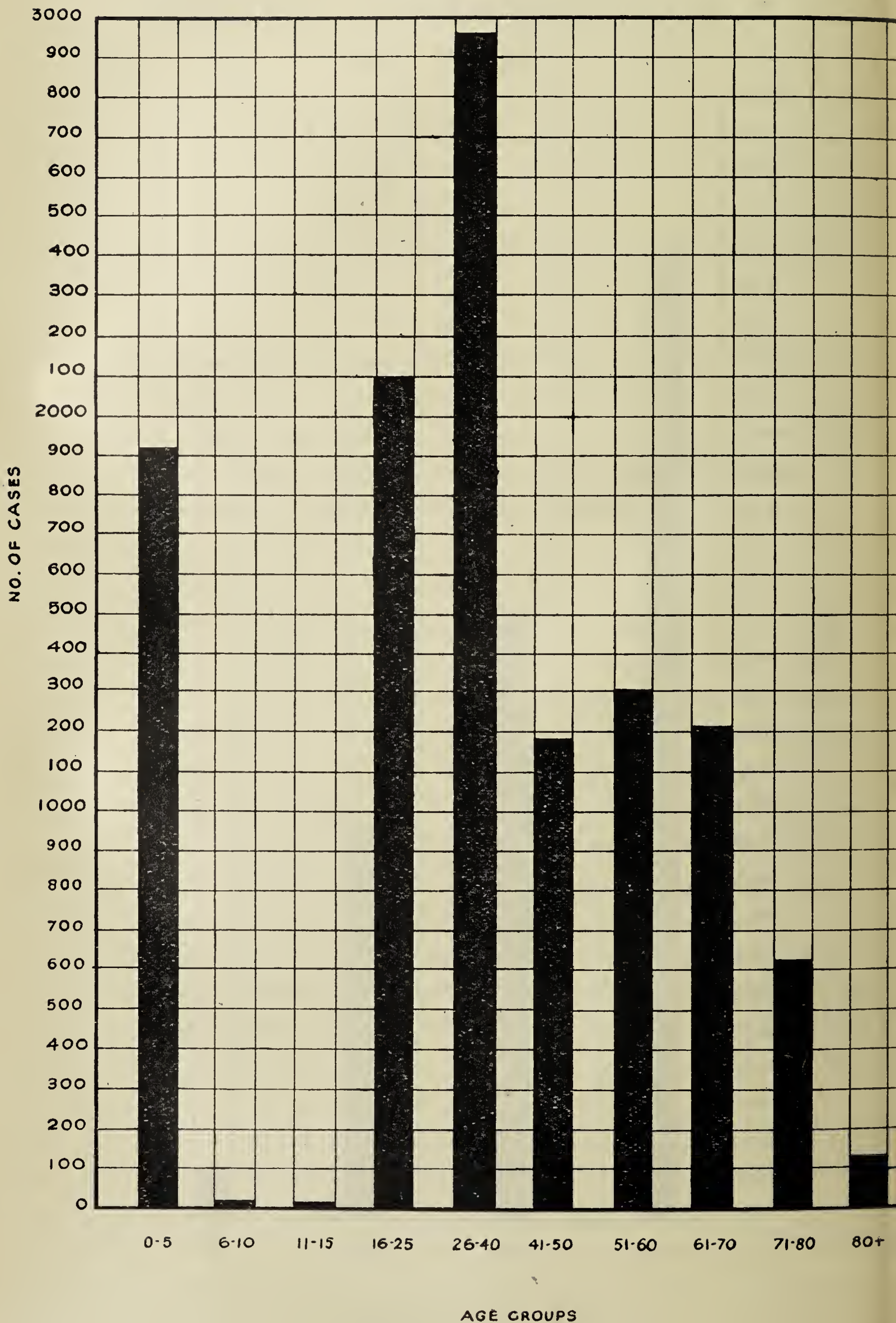
Charts Illustrating Relative Proportions of Age Groups.
(See Tables X XI & XII)

A. BOOTH HALL HOSPITAL (All Cases)



B. CRUMPSALL HOSPITAL (All Cases)

1908 3 3 2095 2963 1180 1300 1207 622



2224 2 10 2540 4012 1644 1460 1368 782 163

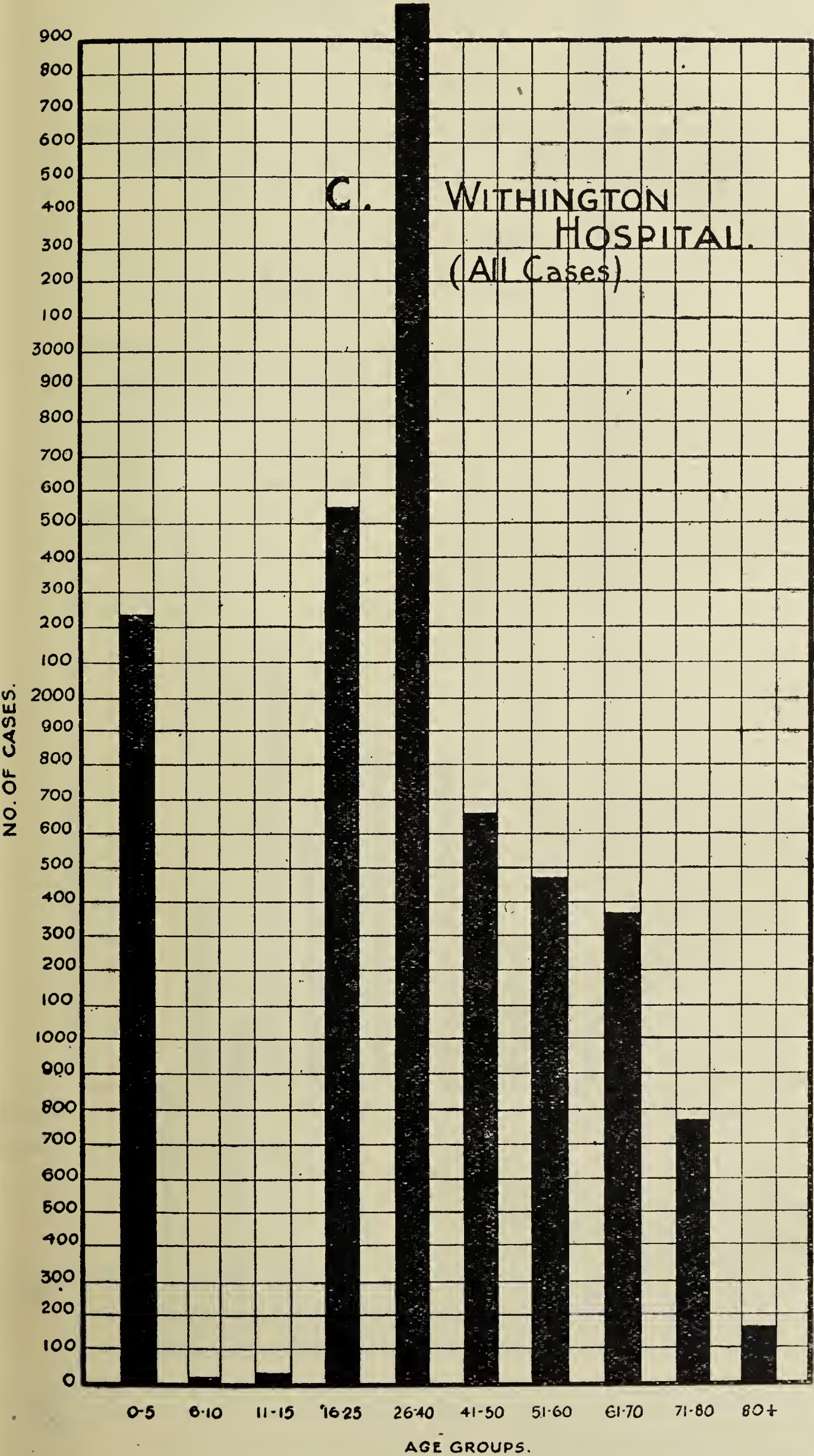


Chart D. Illustrating Distribution of Class 2.
Cancers and other Tumours
into Age Groups.
(From TABLES X XI & XII)

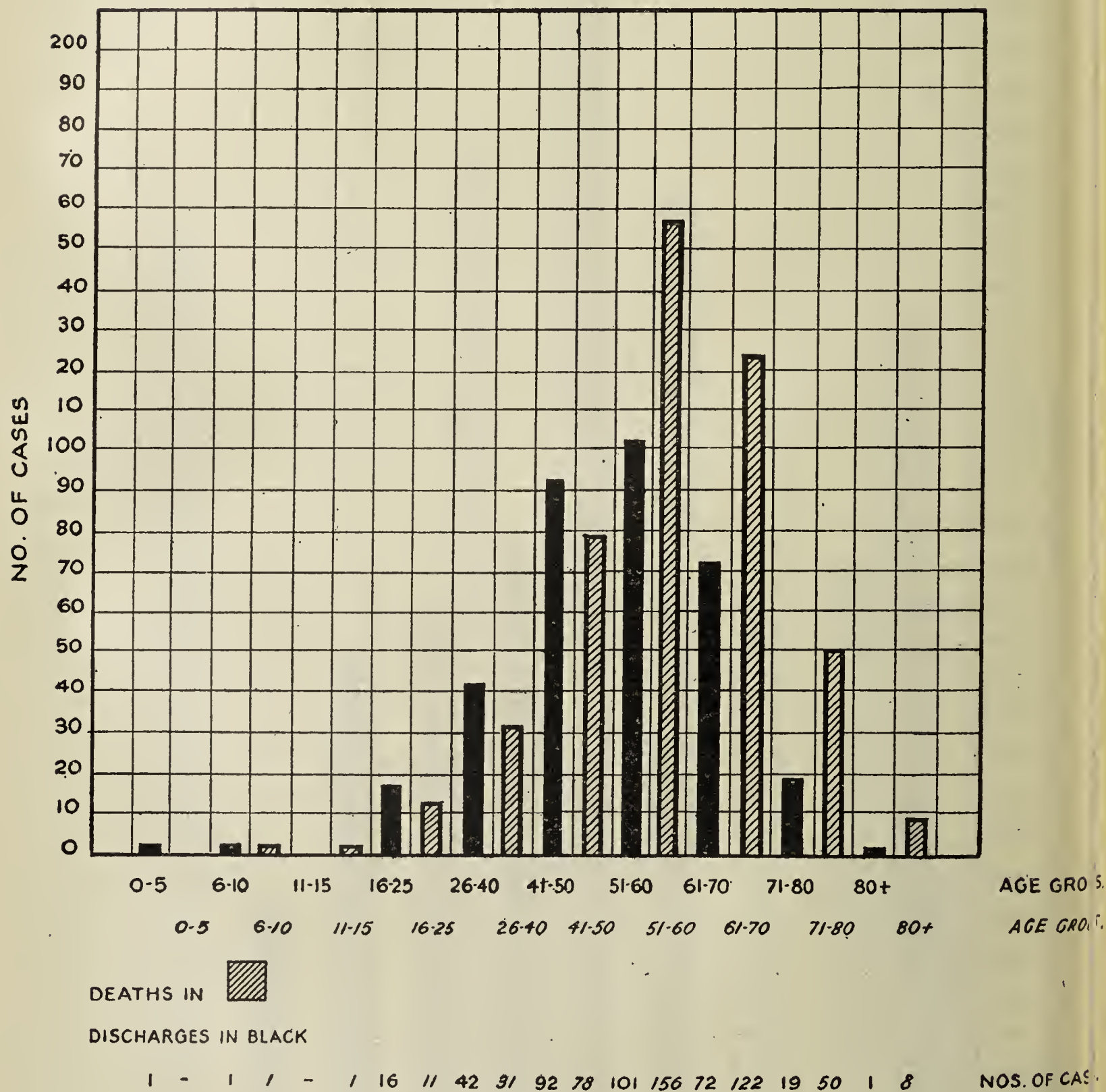
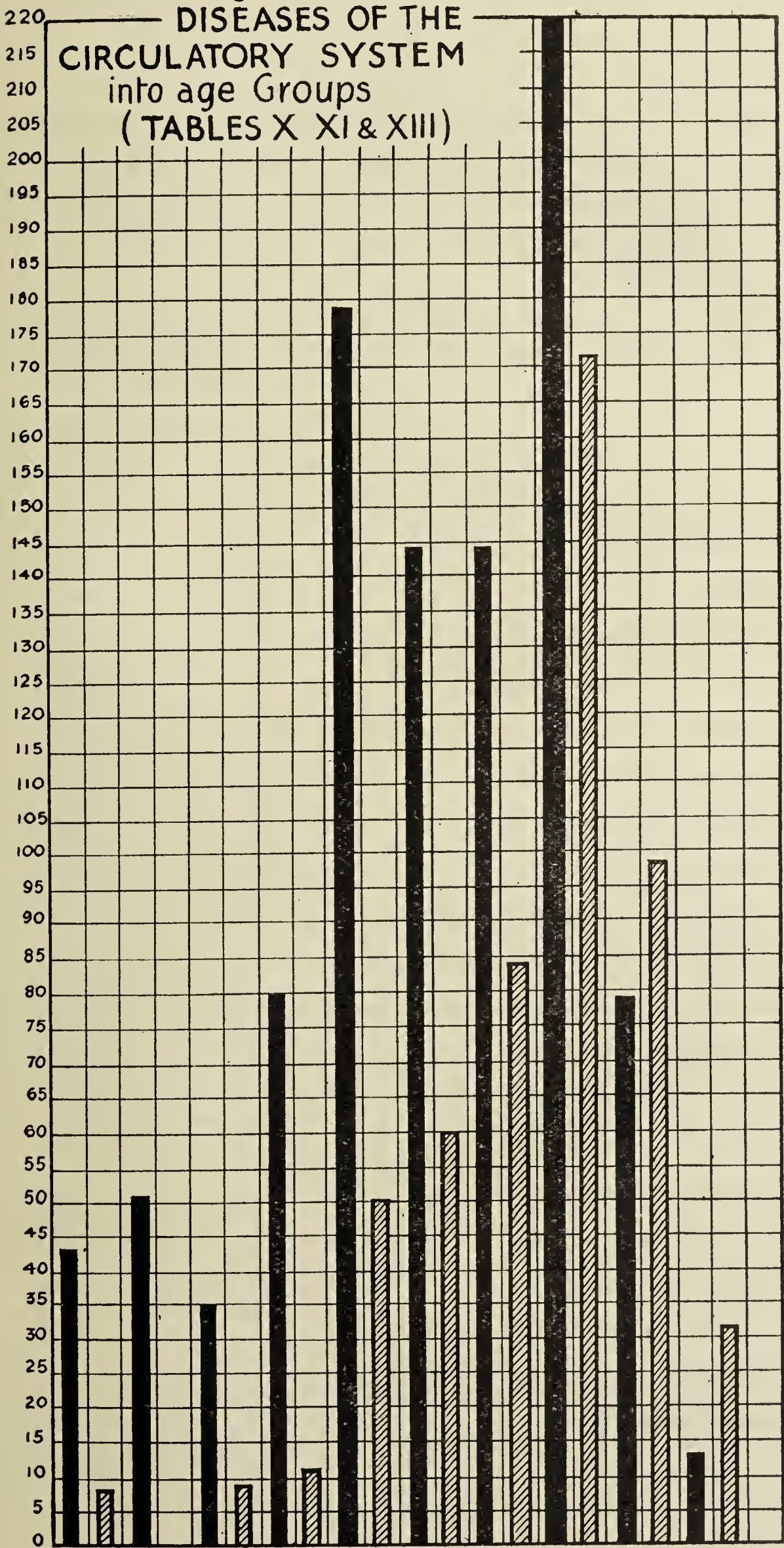


Chart E. Illustrating Distribution of Class 7.



ARGES IN BLACK

MS IN 

0-5	6-10	11-15	16-25	26-40	41-50	51-60	61-70	71-80	80+	AGE GROUPS.									
0-5	6-10	11-15	16-25	26-40	41-50	51-60	61-70	71-80	80+	AGE GROUPS.									
43	8	51	-	35	9	80	11	178	50	144	60	144	84	220	172	84	98	13	NOS. OF CASES.

Patient-Days.

Table XVI. shows how the total patient-days of the hospitals were distributed among the various disease groups in each hospital, and the following tabulations of disease groups in descending order of days and average stay is an index to the degree of acuteness as well as to the volume of the work done :—

TABULATIONS OF DISEASE GROUPS ACCORDING TO (A) PATIENT-DAYS AND (B) AVERAGE STAY (DISCHARGES AND DEATHS IN GENERAL HOSPITAL, 1935).

A.

Disease Group	Patient—Days
†Infectious disease	116,667
*Healthy	110,827
Diseases of respiratory system	99,560
Diseases of nervous system	95,364
Diseases of digestive system	79,948
Rheumatism, etc.	73,664
Diseases of circulatory system	66,899
Diseases of skin	57,210
Diseases of genito-urinary system	46,015
‡Violence	44,713
Old age, senility, and senile decay	42,374
Cancer and other tumours	36,612
Diseases of pregnancy, etc.	26,736
Diseases of bones, etc.	18,675
Ill-defined diseases	10,964
Diseases of early infancy	6,812
Diseases of blood, etc.	5,663
Congenital malformations	3,661
Convalescence	1,833
Chronic poisoning	413
	944,610 days

B.

Disease Group	Average Stay in Hospital
	Days
Diseases of bones, etc.	83·74
Old age, senility, and senile decay	76·77
Congenital malformations	59·05
† Infectious disease	57·69
Rheumatism, etc.	52·39
Diseases of blood	51·95
Convalescence	48·24
Cancer and other tumours	47·80
Diseases of nervous system	46·97
Diseases of circulatory system	44·13
Diseases of genito-urinary system	33·10
Diseases of skin	32·27
Diseases of respiratory system	30·34
‡ Violence	29·53
Diseases of early infancy	28·62
Ill-defined diseases	20·96
Diseases of pregnancy, etc.	18·89
Diseases of digestive system	18·80
* Healthy	14·18
Chronic poisoning	11·47
Average stay—All cases	30·51 days

* Including mothers and infants discharged from maternity wards.

† Including tuberculosis patients.

‡ Including accidents associated with fracture.

Sources of Admission.

Table XVII. (showing the sources of admission of patients) exhibits some variations from last year's figures. The number of patients sent in by general practitioners direct, totals 10,490, as against 9,323 the previous year. The number of "other" admissions increased from 4,696 in 1934 to 4,835 in 1935. The number of patients transferred from voluntary hospitals fell from 2,769 to 2,517. The number of patients sent into hospital by district medical officers fell from 6,924 to 6,082. Two new sources of admission are included, *i.e.*, casualty departments and child welfare centres. The number of admissions through the Withington casualty department was 84.

The form and matter of the tables to be produced from the mass of information now at the disposal of the department regarding municipal hospital patients are continuously under review.

Casualty Departments.

In last year's annual report mention was made of the establishment of casualty units at the three municipal general hospitals. These units were established on February 1st, 1935, in accordance with the instructions of the City Council, and the volume of work with which these units have dealt has far exceeded expectations. In the case of Withington Hospital, in particular, it is evident that the provision of the new unit has materially relieved other hospitals in the southern part of the City, and it cannot be doubted that the close proximity of the Withington casualty department to the new Wythen-shawe Estate has been of benefit to persons injured or suddenly taken ill in that area. The activities of the Withington unit have proved of great interest and a special report on its work will be found in the report of the Medical Superintendent of the Hospital (see p.p. 194 *post.*).

Hospital Almoner.

The appointment of a hospital almoner in the out-patients' department at Withington Hospital was continued during 1935 and the results are again gratifying. A special section of the Medical Superintendent's report is devoted to this work (see p.p. 198 *post.*).

Staff.

The staffs concerned with the central and local administration of the hospital and institution service have continued to carry out their duties efficiently. There are no outstanding changes to report this year.

Hospitals Stores Accountancy.

The central system of hospital stores accounting and stores control referred to in previous annual reports operated satisfactorily during the year 1935. One indisputable fact may be presented as evidence of the success of this scheme—it is that the annual estimate for hospital supplies is lower than it was before the introduction of this scheme, and that, in the meantime, prices have hardened in practically every market. It is not that the scheme has caused any establishment to cut down its purchases of supplies, for, obviously, such a claim might have a double meaning. It is, however, evident that the possession of detailed information regarding supplies, assembled in a uniform

manner and dealt with by a single administrative unit, has enabled annual estimates to be framed on a very accurate basis, and in as much as accurate estimation can be very profitable to the ratepayers of the City, it may be held that the scheme has benefited the ratepayers. The value of the scheme from an accountancy point of view has been amply demonstrated already.

Recovery of Costs of Hospital Maintenance.

During the financial year ended March 31st, 1935, the amounts recovered under this heading were as follows :—

From	Booth Hall	Crumpsall	Langho	Rose Hill	Withington
	£	£	£	£	£
Paying patients at fixed weekly charges	183	2,790	Nil	Nil	6,448
Patients' relatives according to means ..	1,542	11,705	1,190	140	12,200

Grand total £36,198

General

As stated earlier in this report, development of hospital services during 1935 continued in accordance with settled policy.

Approval was obtained to establish a library of educational films in the central department, and under this authority thirteen films have now been purchased dealing with various anatomical and nursing subjects. These films are issued on demand to hospitals possessing cinematographs, and are a useful adjunct to the training of junior nurses.

A suggestion by the Crumpsall Hospital pharmacist arising out of his attendance at a pharmaceutical conference led to the appointment of a consulting pharmacologist and a consulting pharmacist for the general hospitals. The gentlemen appointed were nominated by the Manchester University. The object of the appointments is to encourage and assist in a practical manner co-operation between hospital pharmacies in the City and to promote the discussion of problems which arise in this important branch of hospital work. It is also hoped that this development will increase the supply of material for research purposes from all Manchester hospitals to the University, and in this respect there is every reason to think that the municipal hospitals will make a useful contribution.

At Crumpsall and Abergele libraries for patients and staff were inaugurated through the good offices of Councillor Mary L. K. Jones, O.B.E. (Chairman of the Libraries Committee) and the Chief Librarian (Mr. C. Nowell). Mr. Nowell in addition, has kindly lent his aid in obtaining free copies of many books from the publishing firms and in securing works of special interest to the medical and nursing professions at the lowest possible terms. The libraries are greatly appreciated by the patients and staff, and they promise to become integral features of hospital life at the two establishments mentioned. It is hoped to extend these arrangements to other hospitals as opportunity offers.

In January, sanction was given for the affiliation to Withington Hospital of the Shrub Hill Infirmary, Worcester, for the training of nurses. These affiliations with outside hospitals are valuable aids in the recruitment of nursing staff and a gesture of encouragement to smaller hospital authorities.

In March the number of radiological sessions at Withington was increased from four to five and it has since been increased to seven. The radiological work at this hospital has increased greatly during recent years, the number of examinations having risen from 1,200 in 1925 to 4,874 in 1935.

At Withington, also, the partial renovation of an old nurses' home was completed in 1935. The resultant accommodation is eminently satisfactory.

At Crumpsall Hospital a ward was converted into a physiotherapy department with accommodation for massage, medical gymnastics, light treatment of various forms, together with the usual attendant rooms, such as dressing rooms and sanitary annexes.

The resident staff of Crumpsall and Withington Hospitals was increased in each case by the appointment of an Assistant Obstetrical Officer.

The principal event of the year at Monsall Hospital in so far as material development is concerned was the commencement of work on the scheme for converting an existing ward into a special isolation ward. The new provision comprises 22 cubicles, two of which contain two beds. Each cubicle contains a lavatory basin. The new ward was not completed at the end of the year, but has since been finished and put into use.

Booth Hall Hospital was provided, in 1935, with a new X-ray plant, at a cost of approximately £650. The new plant is shock-proof, and meets the requirements of the memorandum on X-ray equipment issued by the Ministry of Health two or three years ago.

The house "Oaklands," adjoining Booth Hall Hospital, was purchased for use as a residence for medical officers, and this accommodation is now in use.

At Baguley Sanatorium the nursing staff was increased by one sister and seven probationer nurses. The additions were required mainly to strengthen the night staff of the sanatorium. An interesting change at this sanatorium during the year was the discontinuation of the practice of publishing in the local press the hospital numbers of seriously and dangerously ill patients. The reason for this change was the extreme difficulty of preventing the patients themselves obtaining knowledge of the hospital numbers and being seriously disturbed by seeing in the newspaper their own numbers on the danger list. Such information is now conveyed privately to relatives.

At the remaining hospitals and institutions steady development of a minor kind took place, but there were no outstanding changes either in actual provision of treatment or in administrative practice.

Some of the matters referred to above are dealt with in greater detail in the reports of the individual officers, which are sub-joined.

ABERGELE SANATORIUM.

By J. E. GEDDES, M.D., Medical Superintendent.

The available beds are allocated according to the age of the patient and the type of disease, as follows :—

Age	Type of Tubercle	Sex	Number of Beds
1—4	Bone and Joint Tuberculosis .. {	10 boys 10 girls	20
4—15	Ditto ditto .. {	37 boys 37 girls	74
1—4	Pulmonary tuberculosis, including tracheo-bronchial glands, peripheral glands, and abdominal tuberculosis {	10 boys 10 girls	20
4—15	Ditto ditto .. {	37 boys 37 girls	74
—	Admission Ward	—	11
.....			
Adults (Plas Uchaf)	Pulmonary Tuberculosis {	42 males 10 females	52
		Total available beds	251
	Isolation Ward	—	10

At the commencement of the year there were 242 patients in the sanatorium :—

44 in the adult section, and
198 in the children's section.

At the end of the year there were 244 patients in the sanatorium :—

48 in the adult section, and
196 in the children's section.

TABLE I.
GENERAL CLASSIFICATION OF CASES TREATED IN 1935.

Classification on Admission	In Residence on 1st Jan., 1935		Admitted		Discharged		Died		In Residence on 1st Jan., 1936	
	Adults	Children	Adults	Children	Adults	Children	Adults	Children	Adults	Children
<i>Pulmonary Group—</i>										
T.B. Minus	11	46	19	32	15	22	—	—	15	56
T.B. Plus Group 1	1	4	5	—	6	4	—	—	—	—
T.B. Plus Group 2	32	11	41	9	38	2	2	2	33	16
T.B. Plus Group 3	—	1	—	—	—	—	—	—	—	1
Observation	—	—	—	1	—	—	—	—	—	1
<i>Non-Pulmonary Group—</i>										
Bones and Joints	—	96	—	31	—	37	—	1	—	89
Abdominal	—	23	—	4	—	12	—	—	—	15
Other Organs	—	—	—	—	—	—	—	—	—	—
Peripheral Glands	—	17	—	8	—	8	—	—	—	17
Observation	—	—	—	1	—	—	—	—	—	1
Totals	44	198	65	86	59	85	2	3	48	196

TOTAL PATIENTS TREATED—

Adults' section of the sanatorium	109
Children's section of the sanatorium	284

TABLE 2.
ANALYSIS OF ADMISSION OF CASES OF BONE AND JOINT TUBERCULOSIS.

	Hip Joint	Knee Joint	Ankle Joint	Spine	Other Bones
Advanced	1	..	..	5	..
Intermediate	9	4	1	1	2
Early	4	4	..	..	..
Totals	14	8	1	6	2

This classification is based on the extent of bone destruction as shown by the initial radiological examination. It does not take into account the degree of activity of the disease.

TABLE 3.
RESULT OF TREATMENT IN DISCHARGED PULMONARY CASES.

Duration of Residence		Under 3 months		3-6 months		6-12 months		Over 12 months		Totals	
Classification on Admission	Condition on Discharge	Adults	Children	Adults	Children	Adults	Children	Adults	Children	Adults	Children
T.B. Minus	Quiescent	..	..	1	..	2	..	..	..	3	2
	Improved	3	..	7	1	..	4	..	1	10	1
	Stationary	..	..	..	..	..	..	..	..	..	1
	Worse	..	..	..	..	..	..	..	..	..	..
	Died	..	..	..	..	..	..	..	..	..	..
T.B. Plus Gr. 1	Quiescent	..	..	..	..	..	..	..	1	..	3
	Improved	2	..	2	..	..	1	..	3	4	1
	Stationary	1	..	..	..	..	..	1	..	1	..
	Worse	..	..	..	..	..	..	..	..	..	..
	Died	..	..	..	..	..	..	..	..	..	..
T.B. Plus Gr. 2	Quiescent	..	..	..	..	1	..	..	..	1	..
	Improved	1	..	11	..	4	2	10	2	26	4
	Stationary	..	..	1	..	..	..	4	..	5	1
	Worse	..	..	..	..	..	..	..	..	..	1
	Died	..	..	1	..	..	1	..	1	1	1
T.B. Plus Gr. 3	Quiescent	..	..	..	..	..	..	..	..	..	..
	Improved	..	..	..	..	..	..	..	..	..	..
	Stationary	..	..	..	..	..	..	..	..	..	..
	Worse	..	..	..	..	..	..	..	..	..	..
	Died	..	..	..	..	..	..	..	..	..	2
TOTALS		7	3	23	1	7	3	14	3	51	10
		10		24		10		17		61	
		..	..	2	6	6	16	22	7	23	30

TABLE 4.

RESULT OF TREATMENT IN DISCHARGED NON-PULMONARY CASES.

Duration of Residence		Under 3 months		3-6 months		6-12 months		Over 12 months		Totals	
Classification on Admission	Condition on Discharge	Children		Children		Children		Children			
*Bones and Joints	Quiescent	M. ..	F. ..	M. 2	F. 1	M. 10	F. 20	M. 12	F. 21		
	Improved	..	..	..	..	2	..	2	..		
	Stationary	..	..	..	..	1	1	1	1		
	Worse	..	..	..	..	..	..	..	..
	Died	..	..	..	..	1	..	1	..		
Abdominal	Quiescent	..	..	..	1	5	5	5	6		
	Improved	..	..	..	..	1	..	1	..		
	Stationary	..	..	..	..	..	..	..	..
	Worse	..	..	..	..	..	..	..	..
	Died	..	..	..	..	..	..	..	..
Other Organs	Quiescent	..	..	..	..	..	..	..	..
	Improved	..	..	..	..	..	..	..	..
	Stationary	..	..	..	..	..	..	..	..
	Worse	..	..	..	..	..	..	..	..
	Died	..	..	..	..	..	..	..	..
Peripheral Glands	Quiescent	..	..	2	..	2	2	4	2		
	Improved	..	..	..	1	..	..	1	1		
	Stationary	..	..	..	..	..	..	..	..
	Worse	..	..	..	..	..	..	..	..
	Died	..	..	..	..	..	..	..	..
TOTALS		..	..	1	3	22	28	27	31	58	

* A complete analysis of 37 cases of bone and joint tuberculosis discharged during the year is shown in Table 11.

The result of treatment in these 149 discharged cases was as follows :—

	Total Cases Discharged	Quiescent	Improved	Stationary	Worse	Died
Adults (pulmonary)	61	6 (9.9%)	45 (73.8%)	7 (11.5%)	1 (1.6%)	2 (3.2%)
Children (pulmonary)	30	18 (60.0%)	9 (30.0%)	1 (3.4%)	—	2 (6.6%)
Children (non-pulmonary)	58	50 (86.2%)	5 (8.6%)	2 (3.5%)	—	1 (1.7%)

The figures in brackets indicate the percentage of the total patients in each group discharged with their disease in the condition stated at the head of the column.

It is of interest to record that of the 30 children discharged in the pulmonary group 27, or 90.0% were either quiescent or improved on discharge, and of the 58 children discharged in the non-pulmonary group 55, or 94.8%, were either quiescent or improved on discharge.

Of the 61 adult patients discharged 51, or 83.6%, were either quiescent or improved on discharge.

The three children who died were in residence for 275 days, 632 days, and 1,396 days respectively. The cause of death was :—

- (1) Pulmonary tuberculosis.
- (2) Pulmonary tuberculosis.
- (3) Spinal tuberculosis with multiple sinuses and amyloid disease.

ADULT SECTION OF THE SANATORIUM.

In residence on 1st January, 1935	.. .. .	44
Admitted	.. .. .	65
Discharged	.. .. .	59
Died	.. .. .	2
In residence on 1st January, 1936	.. .. .	48

The more important aspects of general and special treatment were reviewed in previous reports. No alteration of importance has been made during the present year. Special treatment adopted as an adjuvant to general treatment is summarised later in the report.

GENERAL TREATMENT.

Physical and mental rest in the treatment of pulmonary tuberculosis is of primary importance. Mental anxiety caused by a knowledge of the nature of the illness and the exclusion of the individual from his family environment must be recognised and remedied. The duration of treatment is inevitably long, and the early desire of the patient to continue treatment for the necessary period may be frustrated by the persistence of this anxiety. The result of treatment is thus closely related to the ability of the individual to adapt himself to a new environment and to dispel a very natural anxiety.

Facilities for occupational therapy and adequate recreation have been made available as one of the most effective methods of attaining this objective.

A handicraft centre was organised during 1933, and as a direct result of the interest of the instructor (R. Birchall), facilities for recreation have been greatly improved.

The following table shows the average duration of treatment from 1932 to 1935 :—

TABLE 5.

Duration of Treatment					
	Under 3 months	3—6 months	6—12 months	Over 12 months	Total
1932	25	42	15	15	97
1933	25	37	31	4	97
1934	17	29	21	12	79
1935	10	24	10	17	61

The figures show that during 1932, when occupational therapy was not so fully organised, of 97 patients discharged 30, or 30.9 per cent., were in residence for a period of six months and over, and during 1935, of 61 patients discharged 27, or 44.2 per cent., were in residence for six months and over. The average duration of treatment as a comparison between 1932 and 1935 has in fact been extended from 187 days to 288 days. The increase in the duration of treatment is largely dependent on the extension of occupational therapy and demonstrates the value of this aspect of sanatorium work.

Heliotherapy.

The value of heliotherapy in the treatment of non-pulmonary tuberculosis is recognised, but in the treatment of pulmonary tuberculosis it has a more limited application. It is, however, of known value in certain cases. The evident improvement in the condition of the adult patients during the summer warrants the assumption that with experience active sun treatment may be adopted more extensively, and while it is recognised that there are other factors which contribute to this result there can be little doubt as to the importance of the part played by sun.

The flat roof of the new recreation room will be utilised as a solarium during the present summer.

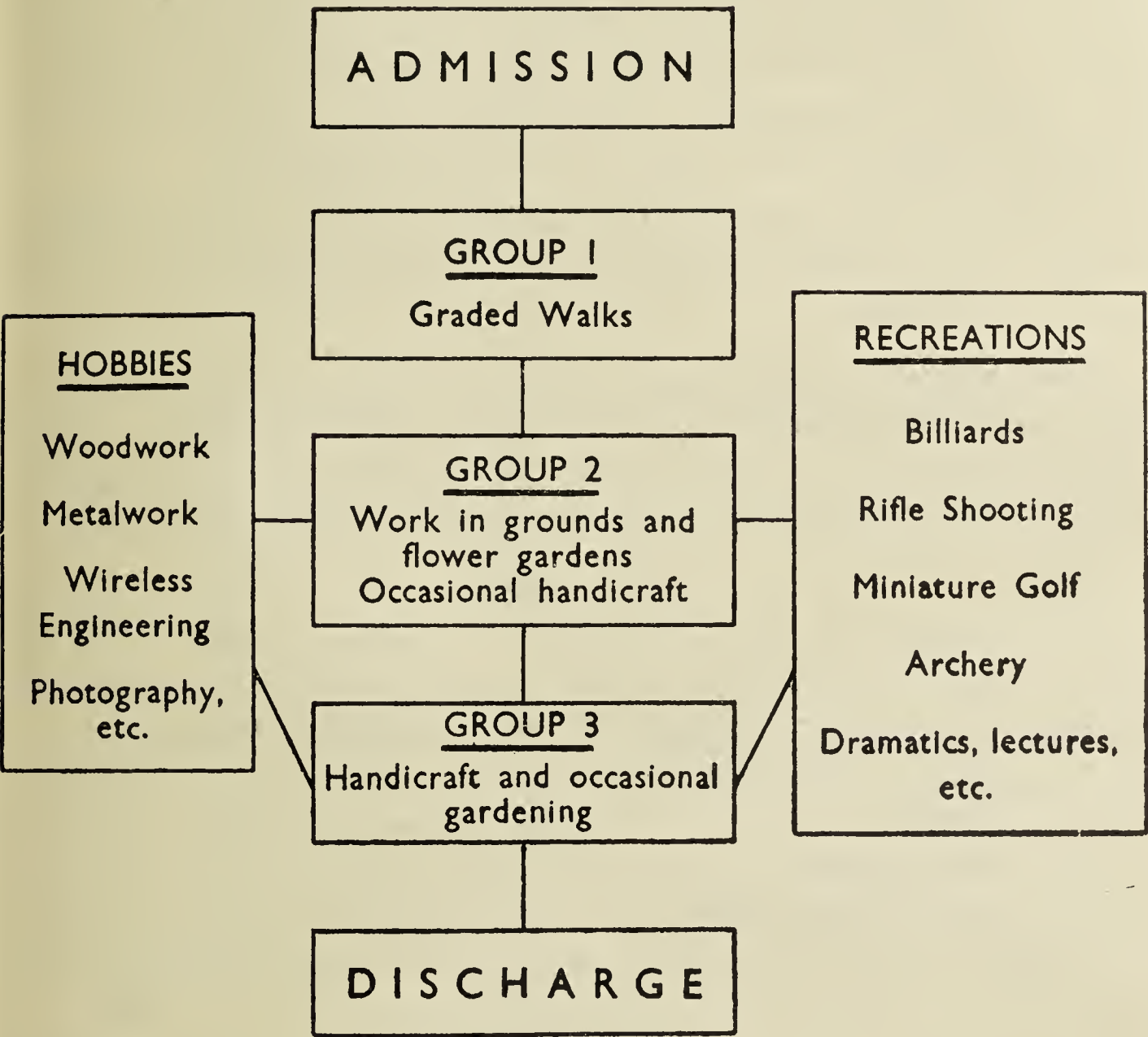
Handicraft Centre.

The construction of splints has given constant work throughout the year. A list of the more important splints made is appended :—

Abergele frames for the treatment of hip joint tuberculosis..	7
Supports for plaster shells	6
Spinal brace	2
Middledorff splints	2
Celluloid jackets	3
Pattens (special)	4
Liston splints	3

The hobby class has been held regularly. A photographic survey of trees on the estate is being made, and consists in the production of general photographs of the trees in summer and winter. Supplementary photographs of the bole and the leaf which exhibit the character of the bark and the form and structure of the leaf are also being produced. This work is of interest, and the completed records will be bound and the photographs supported by short descriptions of the trees. It constitutes one of several hobbies arranged in connection with the handicraft centre.

In view of its importance, the following diagram of the scheme of occupational work is reproduced :—



SPECIAL TREATMENT.

Treatment by artificial pneumothorax :—

Successful inductions	2
Unsuccessful inductions	—
Discontinued	2
Refills	96
Gomenol in oil replacement of purulent pleural effusions	18

Gold Salts.

Crisalbine has been used alone or in conjunction with artificial pneumothorax in 24 cases.

Nordalin Treatment.

The treatment consists in the oral administration of tablets. The tablets are of three kinds :—

- (1) A sulpho-guaiacolic acid precipitate from antitubercular blood plasma with 0·00004 gramme of Koch old tuberculin to each 0·0025 gramme precipitate. This in tablet form is called Nordalin A.
- (2) A sulpho-guaiacolic acid precipitate from antitubercular blood plasma. This in tablet form is called Nordalin B.
- (3) An organic sulphonic acid precipitate from the subcutaneous tissue and reticulo-endothelial cells. This in tablet form is called Recytel.

These tablets are given in a certain definite sequence. The treatment has been used in ten instances in cases which have proved refractory to other treatment adopted. The results attained with so limited a trial do not justify any statement of opinion as to the value of this method of treatment.

X-RAY WORK.

The following table shows the number of radiograms taken during the year. Over a hundred screen examinations were made in connection with artificial pneumothorax treatment and are not recorded in this table :—

Lungs (antero-posterior)	110
Lipiodal	1
Bone and joint	1
Gastric (barium meal)	3
	<hr/>
	115
	<hr/>

LABORATORY WORK.

A list is appended of specimens examined and other work done in the laboratory during the year :—

Sputum—Ordinary examination (Ziehl-Neelsen)	373
„ Concentration (Pottenger)	156
„ Inoculation (Lowenstein-Jensen medium)	85
Urine—Ordinary	4
„ Special	1
Blood counts	6
Throat swabs	2
Pleural fluid examinations	6
Fæces (examination for Tubercle Bacilli)	1
Gastric analysis	2
	<hr/>

RESULTS OF TREATMENT.

Weight Records.

The following table shows the weight records of patients discharged during the year. The records show in a general way the response made by these patients to the regimen of treatment :—

TABLE 6.

Total Discharges	Gain in Weight				Stationary	Loss in Weight	
	1—6 lbs.	7—13lbs.	14—19 lbs.	20 lbs. & above		1—6 lbs.	7—14lbs.
61	14 (22·9%)	16 (26·2%)	8 (13·1%)	6 (9·9%)	11 (18·0%)	6 (9·9%)	—

The table shows that of 61 patients discharged during the year 44, or 72 per cent., gained in weight, and 17, or 28 per cent., were either stationary or lost in weight.

Patients Discharged as “ Quiescent ” or “ Improved.”

The duration of treatment depends on the response of the individual patient. On discharge it is desired that the general condition of the patient should be satisfactory, that the temperature and pulse records should be within normal limits, and that the clinical signs and the result of radiological and other ancillary examinations denote inactive disease. In the case of 51 of the 61 patients discharged during the year these postulates have been attained.

GENERAL NOTES.

Recreation Room.

The new recreation room was completed during December and provides excellent facilities for recreation. The following accommodation has been provided—billiard room, canteen, quiet room for reading and writing, sanitary annex, drying room for coats, and a general recreation room which is also available and is equipped for cinema programmes. A 16 mm. sound projector has been provided and arrangements made for the exhibition of films once a week.

Library.

Mr. C. Nowell, the Chief Librarian, visited the sanatorium during the year, and at his suggestion and with his co-operation a library was formed for the use of the patients. The library is a permanent one and consists of 100 volumes to which 5 volumes are added each month. An evident need has been admirably met by the interest of Councillor Miss Kingsmill Jones, J.P., O.B.E., Chairman of the Libraries Committee, and Mr. C. Nowell.

Religious Services.

The Rev. H. R. Hughes, M.A., Vicar of Abergele, and Ministers from the Nonconformist churches have held regular services throughout the year. These services have been greatly appreciated by the staff and patients. I desire to record our appreciation of this work.

CHILDREN'S SECTION OF THE SANATORIUM, 1931—1935

The children's section of the sanatorium was opened during June, 1931, and the present time is opportune to state the results attained. During the period of four and a half years 304 children have been discharged. The result of treatment in these children is shown in the following table :—

TABLE 7.

	No. of Cases Discharged	Quiescent	Improved	Stationary	Worse	Died
Pulmonary .	139	87 (62·6%)	43 (30·9%)	3 (2·1%)	—	6 (4·4%)
Non- pulmonary	165	129 (78·2%)	21 (12·8%)	7 (4·2%)	1 (0·6%)	7 (4·2%)
Total	304	216 (71·0%)	64 (21·0%)	10 (3·2%)	1 (0·4%)	13 (4·4%)

The figures in brackets indicate the percentage of the total patients in each group discharged with their disease in the condition stated at the head of the column. Of 304 children discharged 280, or 92 per cent., were either quiescent or improved on discharge. In the case of bone and joint tuberculosis, of 165 discharged 150, or 91 per cent., were quiescent or improved on discharge.

The terms “quiescent” and “improved” are used because it is impracticable to adopt the classification “cured,” but in each of these 280 children discharged as “quiescent” or “improved” there was an absence of all clinical signs of activity of the disease. The final verdict will only be passed after they have been under dispensary supervision for a requisite period.

CHILDREN'S SECTION, 1935.

In residence on 1st January, 1935	198
Admitted	86
Discharged	85
Died	3
In residence on 1st January, 1936	196

GENERAL TREATMENT.

Non-pulmonary Tuberculosis.

Local treatment without concurrent general treatment is most likely to be productive of bad results. The use of sunshine as an integral feature of the general treatment of non-pulmonary tuberculosis is recognised. The indications for heliotherapy vary. • The duration of exposure depends upon the age and physical condition of the patient, the activity of the tuberculous lesion and upon the sensitivity of the child to light.

The sunshine hours, the rainfall, and the temperature constitute the more important climatic features from the physiological aspect. The sunshine hours, rainfall, and temperature for 1935 for North Wales and Manchester are appended for comparison :—

	Sunshine Hours		Rainfall in Inches		Mean Temperature	
	North Wales	Manchester	North Wales	Manchester	North Wales	Manchester
January	34·6	10·0	1·65	1·83	42·4	42·7
February	53·9	14·3	2·17	3·41	43·9	43·2
March	113·4	68·3	0·50	1·64	44·9	44·3
April	170·8	119·3	2·00	2·52	46·8	47·5
May	247·1	213·0	1·63	0·83	50·9	51·3
June	179·9	146·0	3·34	3·35	58·4	59·9
July	224·1	184·6	0·47	1·58	61·4	65·2
August	184·3	148·2	0·81	1·68	60·4	63·6
September	147·7	90·0	5·28	5·61	57·4	57·4
October	73·3	32·3	4·57	6·40	50·7	49·3
November	69·3	19·2	2·51	4·58	45·3	46·4
December	41·6	3·5	2·50	3·35	39·5	38·2
Totals	1540	1048·7	27·43	36·78	50·17 Average	50·8 Average

(We are indebted to the Medical Officer of Health, Rhyl, for the North Wales records.)

The following table shows the weight records of the children discharged during the year. These records show in a general way the response made by the children to the regimen of treatment :—

TABLE 8.

Total Discharges	Gain in Weight				Stationary	Loss in Weight	
	1—6 lbs.	7—13lbs.	14—19 lbs.	20 lbs. & over		1—6 lbs.	7—14lbs.
88	2 (2·3%)	19 (21·6%)	14 (15·9%)	47 (53·4%)	6 (6·8%)	—	—

The figures in brackets indicate the percentage of the total children discharged with a weight record as stated at the head of each column.

The table shows that of 88 children discharged 82, or 93·2 per cent., gained in weight, and of this number 47, or 53·4 per cent., gained over 20 pounds ; 6 or 6·8 per cent., did not gain in weight.

LOCAL TREATMENT.

Non-Pulmonary Tuberculosis.

Hip Joint Tuberculosis.

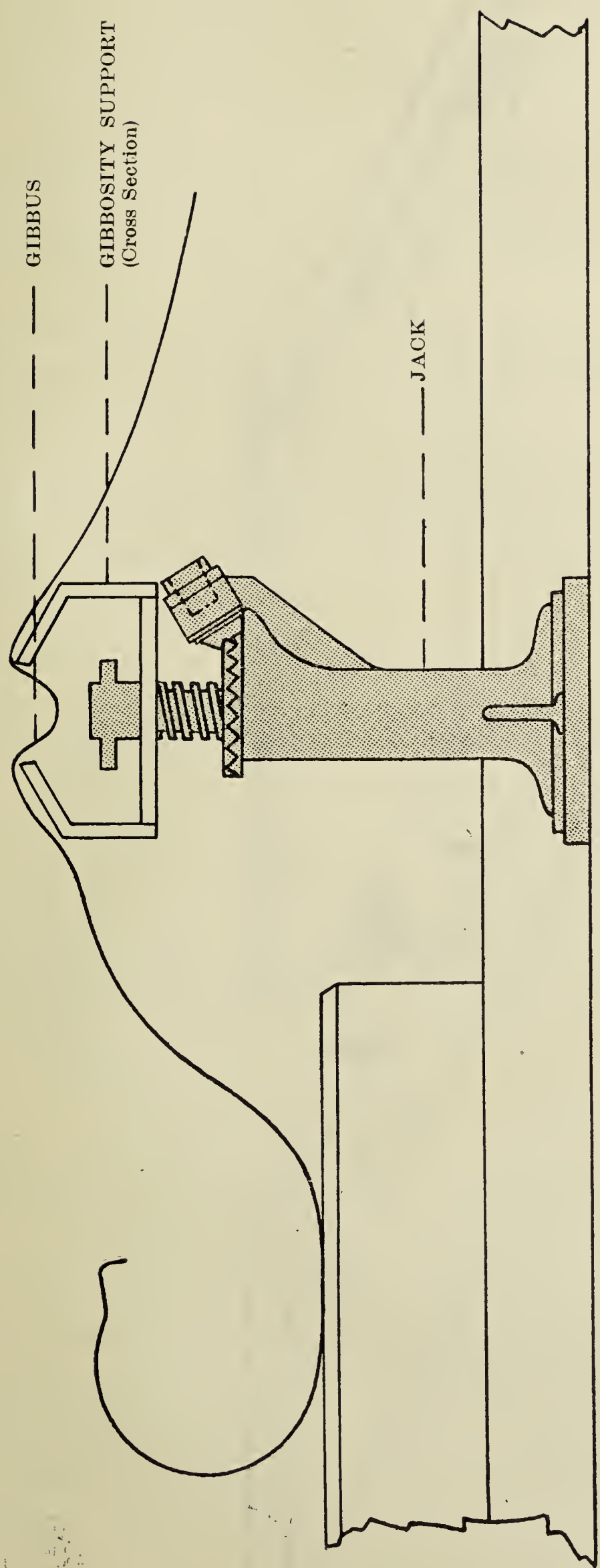
The frame introduced during 1933 (described in the report for that year) for the treatment of hip joint tubercle has been in constant use during the past two years. Thirteen frames have been constructed in the handicraft centre. Small alterations have been made in the original model. The frame has been of particular value in the treatment of children below the age of six. The rapid bone absorption and tendency to subluxation which characterise hip joint tuberculosis during this age period have been reduced.

Spinal Tuberculosis.

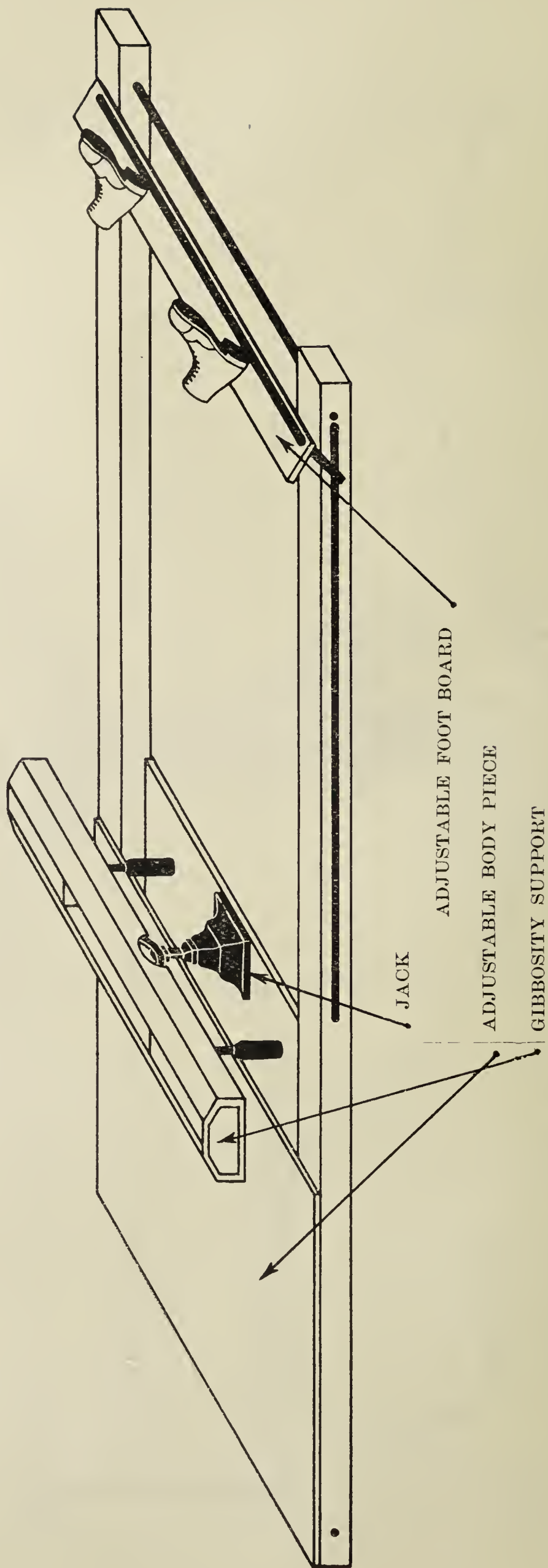
Reference was made in the report for 1934 to the methods adopted in the treatment of vertebral disease. The use of the anterior plaster shell with gibbosity pad has been extended, and the efficiency of this form of splintage tested. The splint has been improved by the addition of lateral axillary supports which reduce the amount of lateral movement of the spine.

During 1935 attention has been given to the development of a scheme of remedial exercises and the provision of apparatus which have as their objective the production of compensatory spinal curves. Gibbus formation must be balanced by a compensatory curve above and below the kyphosis. It is apparent that if the outline of the normal spinal curve is altered in one part compensation for such alteration must be developed.

A splint has been constructed to facilitate the development of these curves. It is used during the latter period of treatment, when radiological evidence demonstrates commencing fusion of diseased bodies. The splint is portrayed in the following diagrams :—



SECTIONAL DIAGRAM OF CENTRAL PORTION OF SPLINT.



It is constructed on a rectangular frame. The central portion consists of a specially-constructed and adjustable gibbosity block supported on a jack. The footboards and thoracic support are movable to accommodate any height of patient. The construction of the gibbosity block with a central aperture for the gibbus and a double cross bar ensures that corrective pressure will be directed to a point immediately above and below the gibbus. The amount of hyper-extension of the spine can be increased by adjusting the jack, and in this way the degree of lordosis above and below the gibbus is increased.

The splint is used for two hours daily. It will be appreciated that the use of this splint augments the postural position which has been maintained during the whole course of treatment.

The following photographs illustrate the masking of a spinal deformity. The gibbus is situated in the upper dorsal area, probably the most difficult area to secure adequate compensation. The degree of bone destruction is shown in the X-ray reduction.

Complications.

In two children with spinal disease and in one child with hip-joint disease a radiogram showed the presence of a hemi-diaphragmatic paralysis in association, in two cases, with large tracheo-bronchial glands, and in the other with a calcifying paravertebral abscess. The cause in each instance was presumably dependent on obstruction of the phrenic nerve in glands or abscess. The development of the paresis was symptomless in two cases, but in the other over a period of two months there was a slight but evident dyspnœa. This phase was ultimately relieved and the child is now ambulant and the respiratory compensation good.

Thoracic Lesions.

The percentage of cases of bone and joint tuberculosis with thoracic tuberculosis has been variously reported by different observers. Thirty-eight children with bone disease were examined to determine in what number thoracic lesions were present and demonstrable by X-ray examination. The children were examined by pulmonary radioscopy and radiograms were taken in all doubtful cases. In six, or 16 per cent., of the cases examined the radiogram demonstrated the presence of thoracic disease. In two cases the tracheo-bronchial glands were grossly diseased, in three cases there was evidence of parenchymal infiltration, and in one a large primary nodule with secondary changes in the root glands.

SPLINT MAKING.

Table 9 shows the number of splints constructed during the year :—

TABLE 9.

Double plaster spica	..	..	..	..	..	..	..	..	43
Single plaster spica	..	..	..	..	..	..	..	..	54
Ankle and knee plasters	..	..	..	..	..	..	..	..	62
Elbow plasters	..	..	..	..	..	..	..	..	2
Plaster beds (anterior and posterior)	..	..	..	..	..	..	..	..	19
Plaster jackets	..	..	..	..	..	..	..	..	26
Celluloid jackets	..	..	..	..	..	..	..	..	4
Celluloid spicas and knee splints	..	..	..	..	..	..	..	..	3
Special Abergele frame for the treatment of hip joint disease									7
Total									220

X-RAY WORK.

The process of healing and bone repair at all stages is observed by serial radiograms. Ambulatory treatment is not commenced until all symptoms have disappeared, and until the radiogram shows that new bone formation has taken place to a satisfactory degree.

Table 10 shows the number of radiograms taken during the year :—

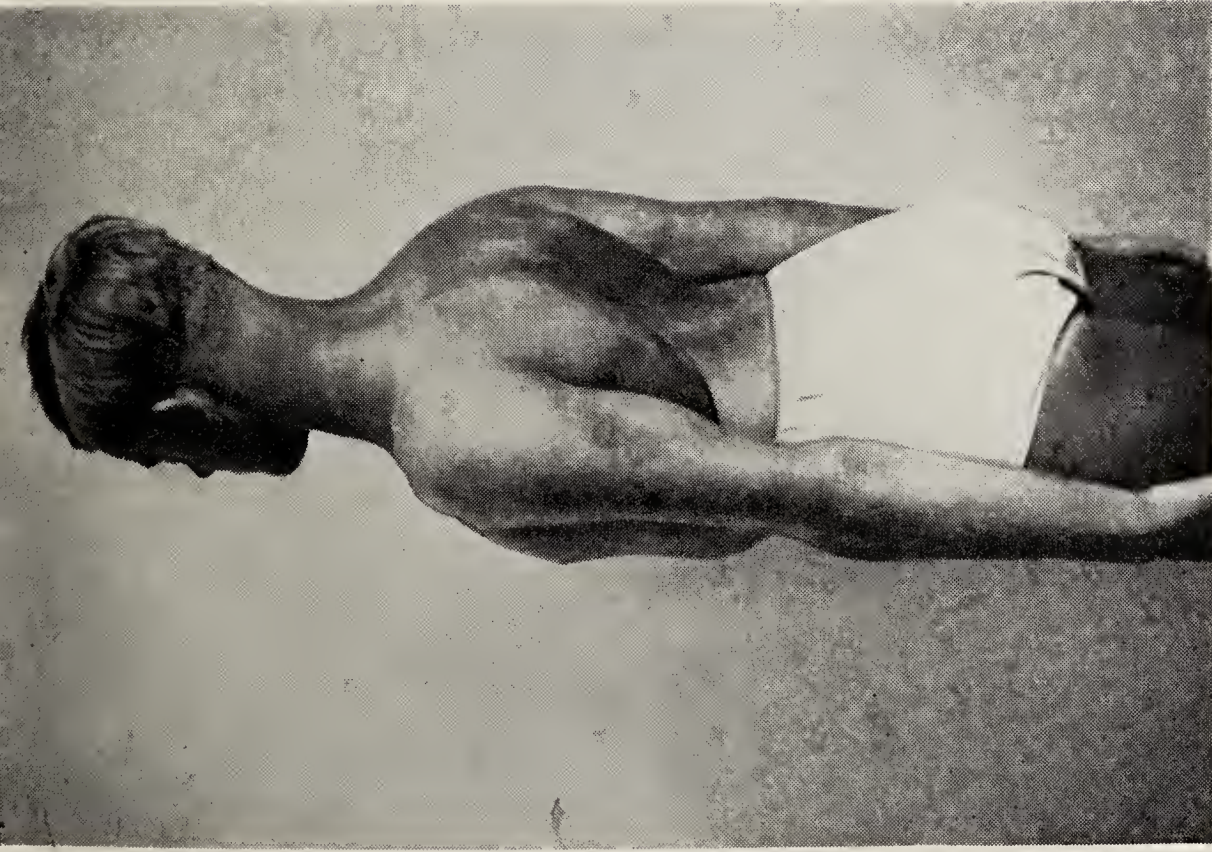
TABLE 10.

Spine	206
Hip joint and pelvis .. .	148
Knee joint .. .	64
Other bones and joints .. .	40
Total .. .	458

The number of operations performed during the year was as follows :—

Excision of knee joint	..	..	..	..	..	..	..	..	1
Excision glands of neck	..	..	..	..	..	..	..	..	1
Arthrodesis hip joint	..	..	..	..	..	..	..	..	2
Osteotomy	..	..	..	..	..	..	..	..	2
Sequestrectomy	..	..	..	..	..	..	..	..	2
Reduction supra-condylar fracture	..	..	..	..	..	..	..	..	1
Excision bursa	..	..	..	..	..	..	..	..	1
Cauterisation of lupus	..	..	..	..	..	..	..	..	1
Excision branchial cyst	..	..	..	..	..	..	..	..	1
									12

I desire to place on record the very great advantage derived from the monthly visits of Professor E. D. Telford, Consulting Surgeon to the Sanatorium.



Result of treatment showing secondary Spinal curves.



A.B.—Healthy vertebral bodies.
E.—Destroyed vertebral bodies.

X
—Actual angle of vertebral column
(degree of actual deformity).

MASSAGE DEPARTMENT.

The work of the massage department has been extended. Classes for general exercises are held daily and special remedial exercises for ambulant cases of bone disease are held twice weekly in the gymnasium. A system of remedial exercises, massage, and electro-medical treatment for all children confined to bed has been put into practice.

The end results in the treatment of bone and joint tuberculosis must be judged by the ability of the child to walk. The condition of the diseased joint is not the sole factor. The stability of healthy joints and tone of the general musculature, if good, are the ancillary factors which will furnish a satisfactory conclusion to treatment.

The results of treatment in respect of bone and joint cases discharged during the year are shown in Table II, in which particular reference is made to the ambulatory efficiency.

A summary of the work carried out in the department is shown below :—

Number of ambulant children who attended classes for general exercises	58
Number of bedfast children who received individual massage and exercises	53
Number of children who received electro-medical treatment	15
Number of children who underwent table exercises ..	35

Table Exercises.—The exercises referred to as “ table exercises ” are devised particularly for pre-ambulant cases of spinal tuberculosis. The exercises are given on a special table and have as their objective the improvement of the muscles of the trunk. The developed muscular system provides the child with a solid muscular corset, which plays an important part in maintaining the correction obtained and reducing the tendency to secondary spinal deformities.

Photography.

Photographic records are now taken as a routine of all patients on admission and on discharge. This work is undertaken by the massage sister, and during the year 315 photographs were taken.

TABLE II.
ANALYSIS OF DISCHARGED CASES.

LOCATION OF DISEASE	Number of discharges	Sound Ankylosis	Ankylosis not complete but position good	Free mobility of joint	Small spinal Gibbosity with efficient compensatory spinal curves	Large Gibbosity with efficient compensatory spinal curves	Ambulation			Remarks
							* Satisfactory	Poor	Not tested	
Hip Joint	6 1 1 2 6 16	+	—	—	—	—	+	—	—	6 Quiescent
		+	—	—	—	—	+	—	—	1 Improved
		+	—	—	—	—	—	+	—	1 Quiescent
		—	+	—	—	—	+	—	—	2 { 1 Quiescent 1 Improved
		—	—	+	—	—	+	—	—	6 Quiescent
Spine	4 2 1 1 8	—	—	—	+	—	+	—	—	4 Quiescent
		—	—	—	—	+	+	—	—	2 Quiescent
		—	—	—	—	+	—	—	+	1 Stationary
		—	—	—	—	—	—	—	—	1 Died
Knee Joint	6 3 1 10	+	—	—	—	—	+	—	—	6 Quiescent
		—	+	—	—	—	+	—	—	3 Quiescent
		—	—	+	—	—	+	—	—	1 Quiescent
Ankle	1 1 1 3	+	—	—	—	—	+	—	—	1 Quiescent
		—	—	+	—	—	+	—	—	1 Quiescent
		—	—	—	—	—	+	—	—	1 Quiescent (amputation below knee)

“Satisfactory” indicates that the ability to walk is such as to meet effectively all the ordinary requirements of daily life.

SPECIAL TREATMENT.
Pulmonary Tuberculosis.

Treatment by Artificial Pneumothorax.

Successful inductions	—
Unsuccessful inductions	3
Refills	76
Treatment by phrenic evulsion	1

Gold Salt Therapy.

Crisalbine or myocrisin was administered in 10 cases.
The number of pulmonary radiograms taken during the year was 142.
Pulmonary (antero-posterior and oblique)—142.

The following table shows the radiological findings in 23 of the 32 T.B. minus children admitted during the year :—

TABLE 12.

Tracheo-bronchial glands	7
Primary pulmonary nodule	1
Infiltration of lung parenchyma	13
Epituberculosis	2
Total	23

Laboratory Work.

A list is appended of the specimens examined in the laboratory during the year :—

	Children	Staff
Sputum—Ordinary examination (Ziehl-Neelsen)	274	6
Sputum—Concentration (Pottenger)	274	2
Sputum—Inoculation (Lowenstein Jensen medium)	116	—
Examination of gastric contents for tubercle bacilli	25	—
Urine—Ordinary	344	106
Urine—Special	59	—
Blood counts	33	2
Fæces (analyses)	7	—
Throat swabs	25	2
Ear swabs	1	—
Pus	31	—
Urethral smears	2	—
Gastric analysis	—	2
Totals	1,191	120

Pulmonary Tuberculosis.

During the year 32 cases of adult pulmonary tuberculosis were treated. The adult type of pulmonary tuberculosis in childhood is relatively uncommon. That it presents a not inconsiderable problem is shown by the fact that of 103 cases of thoracic tuberculosis treated during the year 32, or 31 per cent., were included in the above category. In 20 cases, or 62 per cent., the pulmonary disease was bilateral, and in 12, or 37 per cent., there was radiological evidence of cavitation. The age groups were as follows :—

2, or 6.2 per cent.	0—5 years.
9, or 28.1 per cent.	5—10 years.
21, or 65.7 per cent.	10—15 years.

The sputum was cultured on the Lowenstein Jensen medium and in 20 cases, or 62 per cent., a growth of human tubercle bacilli was obtained. The above cultures included several in which growth was delayed or did not exhibit the characteristic features of the human organism. These were submitted to Dr. Stanley Griffiths who confirmed the presence of an eugonic strain. In twelve, or 38 per cent., no growth was obtained mainly on account of the absence of proper sputum at the time of investigation. The investigation is being continued, and where no sputum is obtainable the filtrate from a gastric lavage is being inoculated.

Special treatment adopted in 20 of these children was as follows :—

Induction of artificial pneumothorax	5
Unsuccessful induction	4
Phrenic evulsion	2
Chrysotherapy (including 4 cases in which gold was used in conjunction with artificial pneumothorax)	13

The immediate result of treatment is as follows :—

Improved	Stationary or Worse	Died
22 (68.8 per cent.)	7 (21.8 per cent.)	3 (9.4 per cent.)

The high percentage of bilateral disease definitely diminishes the practicability of adopting collapse therapy in any considerable number. The immediate response to treatment has been moderately good.

Immunisation.

Children in residence on the 1st January, 1935, and those admitted during the year, with the exception of cases of active pulmonary tuberculosis, have been immunised against diphtheria. Toxoid-antitoxin floccules (T.A.F.) was used and the work has been completed with a complete freedom from any severe reaction. Children over ten are Schick tested before immunisation. The immunisation of children on admission has been adopted as a routine.

Dental Treatment.

The dental surgeon (Mr. A. Smith, L.D.S.) visits the sanatorium once a fortnight, and in addition to the work detailed below he instructs the children at regular intervals on the proper care of the teeth.

The following table shows the condition of the teeth of children admitted during the year :—

Age Group	All Teeth in Good Condition	One to Four Defective Teeth	Over Four Defective Teeth
1—6	22	10	2
7—15	17	33	2
Totals	39	43	4

Summary of dental work performed during the year :—

Visits	28
Extractions	269
Fillings	151
Scalings	12
Straightening	1

NURSING STAFF.

Miss E. J. Knowles, Matron.

The sanatorium was recognised by the General Nursing Council as an affiliated hospital during December, 1935. A sister tutor has been appointed and a lecture room equipped to meet all the requirements for the training of probationer nurses for the Preliminary State Examination and the Certificate of the Tuberculosis Association. An impetus to the training of the nurses has been secured by the provision of a 9 mm. projector apparatus. The films are silent and are valuable in augmenting the lectures and practical instruction given by the Sister Tutor.

Reference has already been made to the provision of a library for adult patients. A circulating library, available for all resident staff has been started. The library consists of 200 volumes and replacements are arranged at regular intervals. The library is organised in conjunction with the Central Library in Manchester.

SCHOOL.

Miss M. C. T. Evans, Head Mistress.

The school staff consists of a head teacher and seven assistant teachers.

The school activities are grouped into five general grades which are arranged to reconcile the activities of school work with the physical capacity of each child.

The school is visited weekly by a member of the medical staff who determines to which grade each child should be allocated.

Arrangements have been made with Mr. Lester Smith, Director of Education, and Mr. W. T. Stevenson, Chief Inspector of Schools, for quarterly visits of inspectors from Manchester. The syllabus prepared for this purpose is mentioned in the school report.

The experiment, which has now been established, promises to be of considerable value to the further development of the school, and will ensure that the staff have knowledge of all recent developments in educational work.

General Statistics.

Number on school register on 1st January, 1935	191
Admissions to school during the year	55
Discharges from school during the year	56
Number on school register on 31st December, 1935 ..	190

The school work is conducted in the wards for children confined to bed, and in the case of ambulant children classes are held in the school rooms. The average number of children who received instruction during the year was, in the former case 128, and in the latter case 62.

Tests of Progress.

On admission each child is tested according to the Northumberland and Ballard Standardised tests. By the use of these tests the child is graded chronologically and attached to the appropriate age group. This test is repeated every six months.

Attainment tests are given each term. These tests are based on the school curriculum and demonstrate the progress made as a direct result of the school work.

The results obtained demonstrate a relationship between (a) Medical grading, (b) Standardised tests, and (c) Attainment tests, as illustrated in the following individual record :—

Date	Age on Admission	(a) Medical Grade	(b) Standardised Tests	(c) Attainment Tests
July, 1933	13 yrs. 5 mths.	Bed	11½ years	42 per cent.
Dec., 1933		Bed	11½ years	51 ..
July, 1934		1	12 years	54 ..
Dec., 1934		2	12¾ years	60 ..
July, 1935	} On discharge { 15½ yrs.	2	13¾ years	69 ..
Nov., 1935		2—3	14 years	81 ..

School Curriculum.

The kindergarten and junior school work remains almost entirely individual in the three R's, but for collective lessons groups are arranged on the “ project ” method.

The work of the senior groups is arranged on the “ Project ” system. The essential feature of this system is the close combination of handicraft work and scholastic work. It allows of collective work in small groups. Each group selects a subject—the centre of interest, and from each centre of interest schemes of practical work and of elementary school work are evolved. The group ultimately produces a project book and model completed and constructed with the project as the central theme. This system promotes collective work but does not entirely exclude individual work, and individual instruction is necessary with the members of each group.

During the year the teachers have each specialised in one of the following subjects, music, art, nature study and biology, elementary science and handicrafts. Schemes of work in these subjects have been devised to augment the work developed in connection with each project.

General.

During the year the head teacher attended the Board of Education course held in London on the Training of Physically Defective Children, and methods suggested have been added to the curriculum.

Dr. MacMahon and Dr. Grundy, Music Inspectors to the Manchester Education Committee, visited the school during December. The teaching of music was specifically discussed, and as a result the methods of instruction in this subject have been altered.

A series of similar visits arranged by the Director of Education will be made regularly throughout the year and the following subjects will be discussed : infant methods, art, handicrafts, nature study, biology, and geography.

Extraneous Activities.

The guide and scout companies have had a successful year. Camps have been held at intervals and the camp has been improved by the addition of a small cooking range. The guides were successful in several competitions and gained the Cripple Homes Silver Cup. The scouts in open competition with other local companies retained the Russell Edwards Shield and the Gele Shield.

The scout troop is under the control of Dr. Murray and the guide company under the control of Miss Evans. This work demands time and patience, and to record appreciation of the enthusiasm of the staff concerned is a pleasurable duty.

FARM AND GARDEN.

The farm and forest work is controlled by Mr. W. Bell.

The farm estate consists of Pen-yr-allt, Ysgeirallt, and Gwreiddyn.

Ysgeirallt Pig Farm.

The present pig-houses are dilapidated and in immediate need of reconstruction. The House Sub-Committee has examined and approved of plans for the erection of one range of houses during the current year.

The quantity and approximate value of transfers from the farm during the year were as follows:—

Milk	29,444 gallons
Potatoes	24 tons
Mutton	397 lbs.
Pork	88 lbs.
Veal	1,427 lbs.

Approximate value of transfers .. £2,527 19s. 11d.

Afforestation.

In pursuance of the scheme, as described in last year's Annual Report, for the further afforestation of the estate, felling operations were completed in the Cae Daffyd plantation, and this plantation has now been cleared and replanted. The foresters at the end of the year were at work in the Ysgeirallt plantation. The scheme for the completion of the afforestation is now well advanced.

Kitchen Garden.

The work of the kitchen garden and of the grounds of the sanatorium is under the control of Mr. W. Rawson, the head gardener.

The kitchen garden has been extended by three-and-a-half acres and the extension will be ready for cultivation during the current season. The orchard has been extended by the addition of 300 apple trees. The extended garden will greatly reduce the need for the purchase of vegetables and fruit from outside sources.

The value and amount of transfers from the garden is shown below. The value of transfers for 1934 was £568.

The transfers from the garden to the sanatorium during the year were as follows :—

Apples 3,428 lbs.	Herbs 1,137 bunches
Beetroot.. .. 2,168 lbs.	Onions 288 bunches
Beans—French .. 540 lbs.	Onions 2,533 lbs.
Beans—Broad .. 1,879 lbs.	Plums 54 lbs.
Blackcurrants .. 225 lbs.	Parsnips 2,727 lbs.
Broccoli and	Peas.. .. 1,580 lbs.
Cauliflowers .. 215 doz.	Pears 120 lbs.
Celery 112 doz.	Potatoes 17,640 lbs.
Cucumbers 235 doz.	Radishes 587 bunches
Cabbages (Savoys). 1,427 doz.	Raspberries 219 lbs.
Carrots 615 lbs.	Rhubarb 2,678 lbs.
Gooseberries 353 lbs.	Strawberries 17 lbs.
Kale (Greens) .. 2,080 lbs.	Sprouts 1,700 lbs.
Leeks 738 lbs.	Tomatoes 1,375 lbs.
Lettuce 391 doz.	Turnips 70 lbs
Marrows 64	

Approximate value of transfers £617

BAGULEY SANATORIUM.

By DR. H. G. TRAYER, MEDICAL SUPERINTENDENT.

The number of available beds was (average) 340.

The number of patients admitted was 583, the daily average number of beds occupied being 334·37.

The following table gives the number of admissions, discharges, etc., for the year 1935, compared with the previous four years :—

	1931	1932	1933	1934	1935
Number of patients :—					
In hospital, 1st January	300	309	311	307	330
Admitted during the year	533	532	549	641	583
Discharged during the year ..	377	362	429	470	477
Died during the year	147	168	124	148	116
Total treated during the year ..	833	841	860	948	913
Remaining in hospital, 31st Dec.	309	311	307	330	320
Daily average number of beds occupied	325·53	325·45	326·9	326·67	334·37
Average length of stay of patients discharged :—					
Males (days)	174·4	167·55	157·42	176·57	165·75
Females „	214·74	252·74	216·95	248·2	184·36
Average length of time in hospital of fatal cases :—					
Males (days)	144·12	206·02	230·26	287·38	276·74
Females „	263·25	165·1	194·13	235·75	322·39
Case mortality	17·64	19·97	14·41	15·61	12·71

Cases admitted from the districts of the Bucklow Joint Hospital Board are included in all totals given in this report. The details of such cases are :—

On 1st January, 1935, there were three patients in the Sanatorium ; seven patients were admitted during the period, three patients were discharged, and two died ; five patients remained in the hospital on 31st December.

Pathological Laboratory Report.

Number of specimens of sputum examined	2,211
Number of specimens found to be positive	1,386
Number of specimens found to be negative.. .. .	825

Other examinations :—

	Number	Result	
		Positive	Negative
Special examination of urine	8	1	7
Pleural effusion	8	1	7
Pus	5	2	3

During the year, a large number of Wassermann reactions were carried out by the Public Health Laboratory.

X-Ray Report.

Number of patients screened	1,662
Number of skiagrams taken	756

Dental Report.

Patients seen	260
Extractions	205
Fillings	6
Scraping and cleaning	2
Dentures	5
Repairs and adjustments to dentures	13

The dentist has also paid numerous visits to the wards for the purpose of examining the mouths of bed-patients.

RETURN SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF PATIENTS
SUFFERING FROM PULMONARY TUBERCULOSIS AND OF OBSERVATION OF
DOUBTFUL CASES DISCHARGED DURING THE YEAR.

[illegible]

[illegible]

Classification on Admission	Age at Discharge	Condition on Discharge	Duration of Stay								Total	Positi Sputum Admissi Negativ Discha
			Under 3 months		3—6 months		6—12 months		More than 12 months			
			M.	F.	M.	F.	M.	F.	M.	F.		
CLASS T.B. PLUS, GROUP II.	Ages 15—24	Quiescent	1	..	1	..	2	28
		Improved ..	5	4	8	6	7	11	2	5	48	
		Stationary ..	3	7	3	4	2	2	7	4	32	
		Worse	1	1	1	2	2	4	1	..	12	
		Died	1	..	2	2	4	4	1	2	16	
	Ages 25—34	Quiescent	18
		Improved ..	10	3	12	2	2	4	2	4	39	
		Stationary ..	6	8	10	4	9	5	6	2	50	
		Worse .. ..	..	..	2	2	1	3	..	2	10
		Died .. ..	..	..	..	3	2	..	1	2	8
	Ages 35—44	Quiescent	1	1	15
		Improved ..	11	..	8	6	1	5	..	1	32	
		Stationary ..	11	2	8	4	7	..	6	..	38	
		Worse	2	1	1	..	..	2	..	..	6
		Died	3	..	1	..	2	1	1	..	8	
	Ages 45—54	Quiescent	14
		Improved ..	4	3	9	..	3	1	2	1	23	
		Stationary ..	5	2	6	..	1	1	..	..	15
		Worse	2	..	2	..	1	..	..	..	5
		Died	2	..	..	..	3	..	1	..	6
	Ages 55 and over	Quiescent	5
		Improved ..	5	3	3	..	2	..	2	..	15	
		Stationary ..	2	..	2	..	2	2	1	..	9	
		Worse .. ..	..	..	..	..	1	..	..	..	1
		Died	1	..	..	..	..	..	1	..	2

Classification of Admission	Age at Discharge	Condition on Discharge	Duration of Stay									Positive Sputum on Admission— Negative on Discharge	
			Under 3 months		3—6 months		6—12 months		More than 12 months		Total		
			M.	F.	M.	F.	M.	F.	M.	F.			
CLASS T.B. PLUS, GROUP III.	Ages 15—24	Quiescent	I	
		Improved ..	..	..	I	I	..	..	..	..	2
		Stationary ..	2	..	I	I	I	..	I	I	7		
		Worse ..	..	3	I	..	..	..	..	I	5
		Died	5	3	4	3	2		17
	Ages 25—34	Quiescent	I	
		Improved ..	..	..	..	..	..	..	..	I	I
		Stationary	I	I	I	I	2		5
		Worse	4	..	I	..	I	I	I	..		8
		Died	7	3	2	2	3	..	2	4		23
	Ages 35—44	Quiescent	
		Improved ..	..	I	..	..	..	..	..	..	I
		Stationary ..	I	..	I	..	..	I	..	..	3
		Worse ..	..	..	..	..	..	..	I	..	I
		Died	4	..	I	I	I		7
	Ages 45—54	Quiescent	
		Improved ..	2	..	..	I	..	..	..	..	3
		Stationary ..	2	2	..	..	..	..	I	I	6
		Worse ..	..	I	I	..	..	..	..	..	2
		Died	8	..	5	I	I	..	2	I		18
	Ages 55 and over	Quiescent	
		Improved ..	..	..	..	..	..	..	..	..	..
		Stationary ..	..	..	I	..	..	..	..	..	I
		Worse ..	..	I	..	I	..	..	..	..	2
		Died	2	..	I	I	I	..		5

Summary of Tables.

Classification	Condition on Discharge				
	Quiescent	Improved	Stationary	Worse	Died
Class T.B. Minus	13	32	7	..	2
„ T.B. Plus, Group I.	1	3	2	..	2
„ T.B. Plus, Group II.	3	157	144	34	40
„ T.B. Plus, Group III.	..	7	22	18	70
Totals	17	199	175	52	114

Observation Cases.

Diagnosis on Discharge from Observation	Stay under four weeks		Stay over four weeks		Totals	
	M.	F.	M.	F.	M.	F.
Tuberculous	9	4	8	2	17	6
Non-Tuberculous	13	6	5	8	18	14
Doubtful	1	3	..	..	1	3

Two deaths (males) occurred among cases not accepted as suffering from pulmonary tuberculosis. The particulars in respect of these deaths, confirmed by post-mortem examination in each case, are as follows :—

Age	Cause of Death
30	Bronchiectasis with spontaneous pneumothorax.
20	Disseminated broncho-pneumonia both lungs. Acute broncho-pulmonary fuso-spirochætosis.

The “Nordalin” Treatment of Tuberculosis.

The details of this treatment are as follows. It consists of the oral administration of three separate preparations, the names of these being as follows :—

NORDALIN A.—A tablet containing 0.0025 gm. of active substance together with 0.00004 gm. of Tuberculin Koch.

NORDALIN B.—A tablet containing 0.035 gm. of active substance, but without any tuberculin.

RECYTEL.—A lipoidogenous organic extract (0.05 gm.),

The "active substance" contained in tablets A. and B., which constitute the essential portion of the treatment, is a sulphoguaiacolic precipitate of the plasma of specially prepared animals.

The dosage was in accordance with the recommendations of the sponsors of this preparation for this country. Alterations were necessary for individual cases.

Thirty-one patients (16 males and 15 females) were selected for treatment, and it was decided that a reasonable period of treatment would be for 26 weeks. Unfortunately, as so often happens in deciding on a definite period of time, only sixteen patients were able to complete the treatment. In six, death supervened; six took their discharge; and in three it had to be discontinued.

Radiological control consisted of a recent skiagram before commencing treatment (not more than six weeks previously) and, for those who completed the 26 weeks course, immediately on its conclusion.

The sedimentation rate—before and after the course.

Sputum examinations—before and after the course. All cases were definitely sputum positive and one became negative.

The classification of the cases was as follows:—

	Number	T.B. plus, II.	T.B. plus, III.
Females	15	4	11
Males	16	8	8

Only sixteen cases completed the full course of treatment, which was carried out in association with the routine measures common to other patients in the sanatorium. As a consequence of the trial the conclusion was reached that no material advantage was secured by the use of this preparation.

Health and Hygiene Lectures to Patients.

As in previous years, instruction has been given in hygiene, preventive measures, and simple facts about the disease.

Occupational Therapy.

Progress still marks this important side of sanatorium treatment. The disposal of finished articles is still one of the main problems, though the kindly help of Provincial Exhibitions Ltd. has been of the greatest assistance.

The launching of a new activity under this heading cannot be allowed to pass without official recognition and record being made.

In August the Sanatorium Magazine saw the light of day; it was, after much thought and deliberation christened "The San Toy." The original editorial staff deserve the thanks of all for filling this gap in the life here,

The magazine is at present printed outside the Sanatorium, but it is reasonable to suppose that some day it may be possible not only to provide the copy but also to print the magazine.

Improvements.

Continuing the policy of covering terrazo flooring with rubber, two further rubber floors have been laid—in the acute wards 2 and 3.

Recreation.

Our sincere and grateful thanks are again due to all those who have so willingly given their services in entertaining the patients. The standard of entertainments has again been very high and have been much appreciated.

Staff.

Thirteen members of the Nursing Staff were successful in obtaining the Certificate of the Tuberculosis Association.

In concluding this report I would again express my personal appreciation of the loyal and willing service rendered by all members of the staff throughout the year.

BOOTH HALL HOSPITAL:
REPORT FOR THE YEAR ENDED 31ST DECEMBER, 1935.
BY DR. J. T. D'EWART, MEDICAL SUPERINTENDENT.

The essential statistics since the hospitals were appropriated are :—

	Number Treated	Number of Days' Maintenance	Duration of Stay	Number of Operations
1930	5,036	196,548	39·0	1,394
1931	5,567	216,356	38·8	2,079
1932	5,991	218,412	36·4	2,251
1933	5,504	193,748	35·2	2,127
1934	5,387	184,131	34·2	2,073
1935	5,959	177,894	29·8	2,087

The year 1935 has been notable for a still further reduction in the number of patients' days' residence. The drop was particularly noticeable in the first quarters of the year, but with the influx of infectious cases during the fourth quarter a considerable increase in the use of the hospital was made.

It is interesting to note that this diminution in " days' residence " is coupled with an increase in the number of patients treated.

The year has been noteworthy first for the opening of the casualty department on February 1st. It was not anticipated that the demand on this department would be very great as the adjacent area contains few large works, but it has proved of very considerable value :—

(a) Patients treated.. .. .	212
(b) Road accidents	30
(c) Cases admitted to the wards.. .. .	72
(d) Cases transferred as in-patients to other hospitals	15
(e) Brought in dead	4

The opening of the casualty department has enabled us to discharge a few patients earlier than usual, utilizing the casualty department for continuation treatment.

The second event of the year was the purchase of " Oaklands " as a residence for the resident medical staff, so relieving accommodation for additional nurses.

Mental Deficiency.

We have been able to deal with all the cases of mental deficiency for whom admission was requested, usually by transferring to the Swinton Home, but occasionally, after investigation and diagnosis, by return to their parents with advice as to further supervision.

Epilepsy.

The difficulty experienced with regard to epileptics under the age of five years and ineducable epileptics between five and sixteen years is still a source of anxiety and difficulty, as the doctors who find admission so easy to the hospital for their ordinary sick children are disturbed when admission for an epileptic is refused without advice as to the availability of other means of treatment. This is particularly the case with young children for whom admission is obtained with incomplete diagnosis and also for older boys who are proving extremely troublesome at home and for whose supervision and control our arrangements are obviously inadequate.

Co-ordination.

Co-ordination with the local Education Authority, the Tuberculosis Department, the Maternity and Child Welfare Department, and the voluntary hospitals has continued as usual. Last year comment was made on the importance of more regular and complete treatment of children suffering with diseases of the ears, and co-operation with the School Medical Officer has led to the suggestion of a scheme which it is hoped may do something to minimise the evil effects of inadequate treatment. If it is found possible to put this or a modified scheme into action we will have as complete a line of treatment as we have at the present time for cases of carditis, chorea, and nephritis. The outline of this scheme has not been given in these reports though it has been in full working order for some years. It is as follows :—

Carditis, Chorea, and Nephritis.

Cases of carditis, chorea, and nephritis of school age are admitted to the hospital and retained until their condition is such that they are able to be out of bed for one hour. The visiting physician then examines them, and, selecting such cases as he considers suitable, transfers them to the "carditis beds" at Rose Hill Convalescent Home. Here they are returned to bed for a week to recover from the effect of the transfer and to accommodate themselves to their new environment. Graduated exercise is instituted until they are able to be up for a whole day. They then become ordinary convalescent cases, and when their condition is satisfactory are discharged to their parents.

When this takes place their discharge is notified to the School Medical Officer, who supervises them by means of a special doctor and nurse. If they are fit they attend school and are examined at one of the clinics periodically, suitable advice being given at this interview. If, however, they are not fit for attendance at school, the visiting nurse keeps them under observation and advises the parents as to medical supervision and requisite rest. If relapse takes place re-admission to Booth Hall is arranged when desired and the process repeats itself.

Under these conditions any case of carditis or nephritis requiring hospital treatment comes under the direct supervision of the school medical officers until ceasing to be of school age, and the parents have the advantage of diagnosis, supervision, and advice. The advantage of this is shown by the increased readiness to obtain the necessary treatment, and it has resulted in a reduction of the number of cases admitted to hospital suffering from very severe lack of compensation. In other words the cases are coming into hospital for treatment before the heart condition has become anything like so bad as it was, thus leading to much earlier convalescence with a shortened stay in hospital. The extreme care taken over the early stages, though it leads to a prolonged retention in hospital on the first visit, is certainly beneficial in the prevention of serious relapses.

Lung Conditions.

Shortly it is hoped to make a census of cases of bronchiectasis and old cases of empyema, with a view to determining the loss of efficiency caused by these chronic conditions and then devising lines of supervision and treatment.

Tuberculosis.

The number of cases of tuberculosis admitted during the year has been 72. Of these 30 were pulmonary and 42 were non-pulmonary. The number of cases transferred to Abergele was 28. 39 cases died.

The hospital serves an extremely useful purpose as an observation station for doubtful cases.

Medical Staff.

The medical staff was maintained at adequate strength during the year. The R.S.O., Mr. Wilson, F.R.C.S., returned to Australia in April and was replaced by Mr. Henry P. Lawson, F.R.C.S. Five resident assistant medical officers have during the year completed their period of stay and have been replaced.

Nursing Staff.

The nursing staff has been maintained at its usual strength, the supply of probationers being more than sufficient to meet our vacancies. The results of the State examinations are as follows :—

Number sitting for preliminary examination 24 ; number passed 24.

Number sitting for final examination 20 ; number passed 18.

The number of nurses who were off duty sick during the year was 146, with a total number of days off duty of 1,673.

Eleven staff nurses having completed twelve months satisfactory training in sick children's nursing and passed the hospital examination have received the hospital certificate, and two pupils took the house-keeping course gaining certificates of proficiency.

Ophthalmic Department.

Number of patients seen by ophthalmologist—56.

Number of patients' attendances—158.

Number of cases of :—

Ophthalmia neonatorum	.. .. .	1
Conjunctivitis	.. .. .	20
Keratitis	.. .. .	8
Blepharitis..	.. .. .	5
Other ..	.. .. .	22

Number of staff seen by ophthalmologist—3.

Number of staff attendances—8.

Dermatological Department.

The work of this department has continued on the usual lines during the year, 12 cases of ringworm, 34 cases of scabies, and 138 cases of impetigo being admitted as such.

The majority of the latter was mainly attributable to the generally debilitated condition of the patient, and instead of recovering in such a short time as is usual with healthy people they take two to three months of persistent care and attention before their resistance has been raised to a satisfactory level.

Aural Department.

The number of operations for removal of tonsils and adenoids during the year was 1,124, of which 871 were performed under the School Scheme.

A considerable number of chronic "running ears" has, as usual, been admitted.

Number of ear cases treated by ionization—38.

Results—Number of cases dry	16
Number of cases moist	8
Number of cases no change	12
Number of cases died	—
Number discharged before the finish	2

The number of operations for mastoiditis was 57, of which 36 were emergency cases of whom 8 died.

Radiological Department.

During the year a new shock-proof X-ray unit for examination purposes has been installed.

During the year 1,951 patients were X-rayed and 2,522 films exposed.

Dental Department.

This has, as usual, been one of the most active departments in the hospital work. The special session allocated to conservative dentistry has been used to the full, and with the additional session for next year should enable still more valuable work to be performed beyond that of mere extraction of teeth already beyond repair.

A much increased amount of work has been done during the year, 2,101 children being inspected of whom 1,182 required treatment, receiving 1,499 treatments. Of these, 379 were special cases inspected because of rheumatism, endocarditis, chorea, nephritis, and tuberculosis. In other words, one-third of those requiring treatment were inspected because of their illness, and the treatment was given to them to facilitate their recovery and not merely on general dental lines. It will be noted that 56 per cent. of the children inspected receive treatments. Of the 1,182 children who were treated 536 had 1,210 teeth extracted, and of those 536 no fewer than 442 required anæsthetics, 95 of them needing general anæsthetics of some duration—that is neither simple gas nor ethyl chloride.

In conservative treatment 322 children had 570 teeth filled, that is about 30 per cent. of those treated had fillings. In addition 229 had cauterisings and 119 had scaling and cleaning.

The increased amount of work done has reduced the cost per patient seen to 1s. 4d., the cost per patient treated to 2s. 1d., and the cost per treatment to 1s. 8d.

Physio-therapy Department.

The physio-therapy department has maintained its activity and utility, the number of cases being as follows :—

Massage—

Number of cases treated 816 ; number of treatments 14,132.

Medical Electrical Treatment—

Number of cases treated 139 ; number of treatments 1,833.

Artificial Sunlight—

Number of cases treated 2,485 ; number of treatments 20,471.

Occupational Therapy.

The staff remains at the figure of four, three being certified trained teachers. Valuable work has been performed but naturally definite statistical results cannot be presented. Stress is still laid particularly on finger work, but special care is taken with the children of long stay being taught to read and so employ and enjoy their time more profitably. This is usually a very tedious

and prolonged process. As regards what is considered to be purely educational work, *e.g.*, arithmetic, writing, composition, etc., the reduction of the long stay cases has materially changed the balance. Obviously if a case is to be retained in the hospital for one or more years this branch of the work looms large, but when patients are retained for a few weeks the importance of this branch of the work diminishes very rapidly. Along with this branch of the hospital activities should be mentioned :—

Scouts and Guides.

The introduction of these two branches of the work was one of the most valuable experiments we tried, but here again the centre of gravity has shifted very materially with the diminution of the long stay cases. To many of the patients scouting and guiding offer an incentive which they have never previously experienced, and it is extremely interesting to see, for example, a boy who has never known real discipline trying to respond to ideals of which he has previously been entirely ignorant.

As mentioned last year the provision of a Den would increase the value of the work enormously.

For this work we are of course dependent upon voluntary assistants, though the instructresses help in the preparation for the various tests. In future appointments it would be well in order to obtain continuity for the instructresses to undertake this branch as a definite part of their own work so as not to be merely adjuncts to voluntary help.

Reference has already been made to the so-called “recreative school” for boys held from 4 p.m. to 6 p.m., whereby the up-patients are removed from their wards and are taught games such as draughts, chess, table tennis, etc., and the value of this to the ward and to the boy is emphasised.

Unfortunately we have neither the accommodation nor the staff to give the girls the same facilities. Accordingly we have not been able to continue our folk dancing classes which proved so interesting and in which we had such considerable temporary success.

Burns and Scalds.

The treatment for burns and scalds has as usual been very successful. There were 93 cases of scalds admitted of whom 4 died, and 23 cases of burns of whom 2 died, giving a death rate of 5 per cent. With the exception of 1 adult the oldest of these 6 patients who died was $3\frac{1}{2}$ years, 1 was under one year, 2 under two years, and 1 under three years. Of the six, 4 died within 48 hours.

General Anæsthetics.

General anæsthetics were given to 2,087 children, of whom 1,258 received Avertin. Emergency operations numbered 205.

CRUMPSALL HOSPITAL.

REPORT FOR YEAR ENDED DECEMBER 31ST, 1935.

BY DR. W. A. RAMSAY, MEDICAL SUPERINTENDENT.

During the course of the year 11,671 patients were admitted to hospital, a decrease of 60 as compared with the year 1934. It is noteworthy that the numbers in hospital remained at a high level until July, contrary to the experience of past years, when a noticeable fall in admissions took place in April and May. It is found that many patients have been on the waiting list of other hospitals for considerable periods and have thus had their term of incapacity shortened by admission to Crumpsall. That the nature of the cases admitted is gradually altering will generally be conceded. Acute conditions of all kinds are replacing the chronic, which formerly constituted the bulk of admissions to municipal and poor-law hospitals. The improved schemes of out-door relief have enabled many sufferers from chronic ailments to be cared for at home, thereby rendering beds available for those who require a prolonged period of hospital treatment.

During the past year the staff has been augmented by the appointment of Dr. H. R. Donald as temporary Visiting Physician. An additional Resident Medical Officer and a Resident Obstetrical Officer have also been appointed.

Several alterations and additions to the fabric of the buildings have been made during the year. Chief among these is the provision of a new physiotherapy department, comprising separate treatment rooms for men and women; sunlight department, gymnasium, waiting rooms, and the usual offices. Much new equipment has added to the efficiency of this very valuable unit.

Various improvements have been carried out in the kitchens, particularly the provision of an electric potato-peeling machine at the main hospital and at the annexe, also the modernisation of the larder at the annexe, which now includes a refrigerating chamber.

A new developing unit has been installed at the X-ray department, and further changes are contemplated following the vacation of the room formerly occupied by the physio-therapy department.

Considerable progress has been made in improving the Maternity Block. Rubber flooring has been laid down in three wards and on the staircases. Bed-pan sterilizers and surgeons' lavatory basins have been provided in each of these wards, while two sets of modern babies' baths have been installed.

During the year the Eastern Home (which was empty) has been altered to provide accommodation for resident ward-maids who have replaced day-workers in the maternity wards. The intention is to employ resident ward-maids as far as possible in the main hospital, especially where there is a danger of infection being carried from outside.

Many other alterations and additions of a minor character have been carried out, resulting in superior service to the patients and incidentally in the improved appearance of the building.

During the year 446 new patients were treated at the physio-therapy department. Treatments comprised 3,458 massage, 4,234 electrical, and 3,678 remedial exercises. New patients in the sunlight department totalled 101, the number of treatments being 1,748.

The X-ray department becomes increasingly busy and is about to be extended. The statistics for the year, as compared with 1934, are as follows :—

	1934	1935
Number of examinations	2,303	3,329
Number of films used	4,230	5,360
Number of treatments	185	234

The hospital possesses a superficial therapy apparatus but no deep-therapy is available, except in the case of cancer patients who are treated at the Holt Radium Institute.

The number of patients transferred to the Radium Institute under the existing arrangements for consultations was 35, and 16 operations were performed at Crumpsall by the Radium Institute staff. The number of treatments carried out at the Institute totalled 98. A considerable proportion of cases were found to be too far advanced for other than palliative treatment. The present arrangement whereby patients are transferred daily for deep X-ray therapy is not an ideal one, but the numbers obviously do not justify the installation of deep-therapy plant at this hospital.

The out-patient attendances are as given below :—

	Patients	Treatments or Attendances
Ear, nose, and throat	65	295
Physio-therapy department	140	3,019
Diabetic clinic	52	1,043
Mothers' clinic	61	184
Dental clinic	769	1,059
Eye department	144	144
X-ray department	212	389
Wards	114	1,565
Total	1,557	7,698

There is a noticeable drop in the out-patient cases treated at the wards, owing to the fact that institution inmates no longer attend the hospital for minor dressings.

The number of operations performed was 1,681, an increase of 521 as compared with last year. In addition 164 anæsthetics were given for the dental surgeon. The number of post-mortem examinations carried out was 152, an increase of 79 over the figure for 1934.

1,871 women made 10,302 attendances at the ante-natal clinic. The post-natal clinic, which was organised at the beginning of the year, was attended by 445 patients, 6 of whom made a repeat visit. This is a very important part of maternity work and ensures that minor ailments and injuries which were not discovered before the patient left hospital are promptly attended to either by admission to hospital or by reference to the patient's medical adviser.

In last year's report attention was drawn to the investigation into self-administered anæsthesia in labour, conducted on behalf of the Royal College of Obstetricians and Gynæcologists. The methods tried out in this hospital comprised the Christie Brown Chloroform-inhaler, Minnitt's gas-and-air apparatus, and Mennell's chloroform apparatus. The two latter were found to be of real value in diminishing the pains of labour. Minnitt's, however, is costly to run and Mennell's apparatus is not without danger unless administered under medical supervision.

During the year 400 patients were seen by the Oto-laryngologist and 222 by the Ophthalmologist. 479 patients were examined by the Dental Surgeon.

There were 78 cases of sickness in the resident nursing staff, the average period of disability being 28 days.

One Ward Sister was off duty for ten months but is now quite recovered and has returned to duty. The non-resident nursing staff had 40 cases of sickness, averaging 30 days. The examination results for the year are as shown below :—

	Entered	Successful
Hospital Final Examinations	42	37
State Final Examinations	42	38
State Preliminary Examinations	43	40
C.M.B. Examinations	28	22

Four pupils took the house-keeping course and gained a certificate of proficiency.

It has now been arranged that each probationer during her course of training is three months in residence at Booth Hall Hospital, in order to gain experience in the nursing of sick children. The arrangement has worked very well as far as this hospital is concerned, and there is no doubt that it is essential to the complete training of a nurse.

LANGHO COLONY.

REPORT FOR YEAR ENDED 31ST DECEMBER, 1935.

BY DR. JAMES SHEARER, MEDICAL SUPERINTENDENT.

On the 31st December we had in residence 287 male and 331 female colonists, of whom 348 were chargeable to Manchester Corporation and the remaining 265 to the following authorities:—

<i>County Boroughs.</i>						<i>County Councils.</i>					
Blackburn	..	..	..	..	13	Cheshire	..	..	..	..	2
Burnley	..	..	..	..	9	East Sussex	..	..	..	..	2
Bolton	..	..	..	..	9	Glamorgan	..	..	..	..	4
Bootle	..	..	..	..	5	Lancashire	..	..	..	..	103
Blackpool	..	..	..	..	1	Middlesex	..	..	..	..	9
Bradford	..	..	..	..	1	Monmouthshire	..	..	..	..	1
Croydon	..	..	..	..	3	North Riding	..	..	..	..	1
Dewsbury	..	..	..	..	1	Surrey	..	..	..	..	10
Ipswich	..	..	..	..	5	Salop	..	..	..	..	1
Liverpool	..	..	..	..	38	West Riding	..	..	..	..	15
Oldham	..	..	..	..	1						
Preston	..	..	..	..	4						
Salford	..	..	..	..	19						
Warrington	..	..	..	..	6						
Wigan	..	..	..	..	1						
Wallasey	..	..	..	..	2						
<hr/>						<hr/>					
118						148					

A severe seizure is one in which the colonist has a typical epileptic fit with twitching and loss of consciousness ; a slight seizure being one in which the colonist may only have a sensation accompanied by momentary loss of consciousness, without twitching.

The following classification of the incidence of seizures is of interest :—

	Males	Females
Decreased incidence	114	94
Increased incidence	65	23
No change	89	193
No seizures during year	45	31
Recent admissions	12	18
	325	359

Three male and four female colonists were transferred to Crumpsall Institution or other Authorities on mental certificates.

There were three fractures during the year.

The general health and physical condition of the colonists during the year was very good.

The employment of colonists on the 31st December was as follows:—

	Male	Female
Domestics—The Homes	106	175
The Administrative block ..	15	25
Laundry	—	30
General kitchen	—	30
Sewing room	—	34
Engineering	4	—
Carpentry and masonry, etc.	9	—
Shoemaking	5	—
Tailoring	2	—
Barbering	1	—
Office and stores	7	—
Farm	24	—
Kitchen garden	8	—
Grounds	69	—
 Total	 250	 294
 Sick and unemployed	 37	 37

Details of work done in some of the departments :—

	New Work	Repairs and Alterations
SEWING ROOM.		
Clothing—Outer	1,004	26
Under	1,855	3,501
Socks, etc.	734	5,160
Uniform	519	118
Farm	24	—
Bedding and Linen	2,895	2,170
	7,031	10,975
TAILOR'S SHOP—		
Uniform clothing	151	8
Colonists' clothing	—	1,492
Sundries	55	2
	206	1,502
SHOEMAKER'S SHOP.		
Boots, clogs, and slippers	222	2,465
Sundries	17	16
	239	2,481

Farm.

At the farming year end, 31st March, 1935, the live stock on the farm comprised :—

7 horses.
86 cows and bulls.
174 pigs.
1,963 poultry.

The total acreage farmed is $266\frac{1}{2}$ acres, of which 149 acres is pasturage, $89\frac{1}{2}$ acres is meadowland, and 28 acres is arable land.

During the year ended 31st March the farm transferred or sold :—

52,837 gallons of Grade "A" milk.
 100,646 eggs.
 4,858 lbs. poultry (1,861 head).
 10,499 lbs. beef (15 head).
 2,469 lbs. pork (14 head).
 292 live pigs.
 57 live cattle (including calves).
 $50\frac{1}{4}$ tons of potatoes.
 174 cwts. cabbage and Brussel sprouts.
 180 cwts. turnips.

In addition, the farm produced for consumption by live stock :—

$102\frac{1}{2}$ tons hay.
 90 tons ensilage.
 10 tons potatoes.

The nett profit for the year was £506 11s. 8d.

A small farm of about 30 acres adjoining the Colony (Cunliffe) Farm will come into the market in February, 1937, and it is suggested that this should be negotiated for with a view to using it as a poultry farm to increase the supply of eggs and poultry to the Corporation hospitals.

Dietary.

The amount allocated to provisions in the annual estimates does not allow any further improvement to be made in the Colonists' breakfast meal. As previously pointed out, with the exception of Sunday, when an egg, brawn, or boiled bacon is issued, and preserves or syrup every morning, the breakfast consists of bread and margarine, porridge, and tea.

General Kitchen.

Since the installation of the automatic refrigerator no trouble has been experienced with milk turning sour or foodstuffs going bad.

It will be necessary in the near future to consider the replacement of the out-of-date open coal-fired ranges with ranges utilising other heating elements, such as slow combustion (anthracite or coke) or electricity.

Electricity.

On the 11th November we ceased generating electricity and commenced taking our supply from the Blackburn Corporation main cable. The old machinery and batteries have been scrapped and sold, and the battery room is now used as the transformer and main switch room. The generating room will be fitted up and used as the Engineer's stores.

Grounds.

The levelling of spoil heaps and the building of rockery slopes and retaining walls has been carried on by the attendant staff during the year, with a corresponding improvement in the appearance of the grounds. The new grass tennis court and putting green will be brought into use in 1936, and the new bowling green will be seeded to be ready for use in 1937. There has been no expenditure for labour on this work and the cost of materials has been limited to rockery stone and seeds.

Recreation.

I would again urge the necessity for increasing the accommodation for recreation, and the need for a building where billiards, cards, etc., could be played, in addition to a new recreation hall for dancing, concerts, cinema, etc.

Staff Cottages.

The need for the provision of staff cottages is no less urgent in view of the small number of resident male staff available at night in case of fire. Such provision should also benefit the health of the staff and the corporate life of the Colony.

MONSALL HOSPITAL.

REPORT BY D. SAGE SUTHERLAND, M.D., MEDICAL SUPERINTENDENT.

At the close of the year 1934 480 patients remained in hospital. During 1935 4,818 were admitted. The total number under treatment during the year was 5,298. There were 211 deaths and 4,645 were discharged cured.

442 remained in hospital at the end of the year.

The admissions showed an increase on the previous year of 502.

The largest number of cases admitted to hospital was during the month of October, when 507 cases were received. The maximum number of patients in hospital was 515 on November 2nd and the minimum number was 315 on July 28th, 1935.

The average daily number of patients in hospital for the year was 424·7, as against 396·6 in the year 1934.

The average duration of stay for each patient was 31·9 days, as against 31·7 in 1934.

The fatality rate for all cases under treatment was 4·3 per cent., as compared with 4·6 during 1934.

In 486 cases, or 10 per cent., the diagnosis was altered from the certified disease.

SCARLET FEVER.

224 cases remained in hospital at the end of the previous year, and during the year 2,355 were admitted, showing an increase of 547 on the previous year. The number of discharges was 2,336, and 14 deaths occurred during the year, giving a death rate of 0·59 per cent. During the previous year the death rate was 0·74 per cent.

The average stay in hospital was 34·8 days, showing a decrease of 3·5 days on the previous year. The average number of days in hospital of fatal cases was 16·6.

The total number of scarlet fever cases receiving antitoxin on admission was 129 = 5·5 per cent.

The following are the immediate causes of death in the 14 fatal cases of scarlet fever :—

Pneumonia	..	..	..	..	..	..	..	..	..	3
Scalds	..	..	..	..	..	..	..	..	..	1
Scarlet fever and diphtheria	..	..	..	..	..	..	..	..	..	2
Nephritis	..	..	..	..	..	..	..	..	..	3
Enteritis and whooping cough	..	..	..	..	..	..	..	..	..	1
Endocarditis	..	..	..	..	..	..	..	..	..	1
Ulceration of neck	..	..	..	..	..	..	..	..	..	1
Measles, broncho-pneumonia	..	..	..	..	..	..	..	..	..	1
Asthma	..	..	..	..	..	..	..	..	..	1

SCARLET FEVER RETURN CASES.

The number of cases of scarlet fever discharged from hospital during the year 1935 was 2,336. The number of true return cases for the year was 73, the return case rate being therefore 3·1 per cent., as against 2·4 per cent. for 1934.

The average duration of stay in hospital of cases giving rise to secondary cases was 34·4 days. The average interval elapsing between the discharge of the primary case from hospital and the onset of the disease in the secondary case was 9·8 days.

Return cases infected :—

During 1st week after discharge of primary case	41·1	per cent.
„ 2nd	36·9	„
„ 3rd	15·2	„
„ 4th	6·8	„

6 cases each gave rise to two return cases.

61 cases each gave rise to one return case.

AGE DISTRIBUTION OF INFECTING CASES.

	Discharges	Infecting Cases	Percentage
Under 1 year	12	1	8·3
1— 4 years	629	13	2·1
5— 9 „	943	39	4·1
10—14 „	437	10	2·3
15—19 „	121	3	2·5
20+	194	1	0·5
Total	2,336	67	2·9

In 17 patients a condition was noted after discharge to which infection might have been attributed, viz.: rhinorrhœa (10 cases), tonsillitis (2 cases), and otorrhœa (5 cases). The other infecting cases remained free from discharges and other complications at the time of the occurrence of the secondary case.

Monthly Table.

1935	Discharges	Return Cases	Percentage
January	220	3	1·4
February	189	10	5·3
March	195	9	4·6
April	181	9	4·9
May	183	3	1·6
June	178	7	3·9
July	160	2	1·3
August	169	6	3·6
September	140	5	3·6
October	224	7	3·1
November	272	4	1·5
December	225	8	3·6
Total	2,336	73	3·1

Minimum—1·3 per cent., July.
Maximum—5·3 per cent., February.

AGE INCIDENCE OF SCARLET FEVER CASES.

Age Incidence	Number	Percentage
0— 5 years	651	27·7
5—10 „	946	40·3
10—15 „	437	18·6
15—20 „	122	5·2
20+	194	8·3

COMPLICATIONS IN SCARLET FEVER.

Complication	Number	Percentage
Rhinorrhœa in Convalescence	392	16·7
Otorrhœa	174	7·4
Nephritis	14	·6
Albuminuria in Convalescence.. .. .	81	3·4
Adenitis and Abscess	3	·1
Endocarditis	10	·4

ACTIVE IMMUNIZATION AGAINST DIPHTHERIA IN PATIENTS ADMITTED TO HOSPITAL SUFFERING FROM SCARLET FEVER.

625 cases of scarlet fever were completely immunized against diphtheria and 48 were incompletely immunized.

DIPHTHERIA.

The number of patients admitted certified as diphtheria was 1,106, as against 1,164 in 1934, showing a decrease of 58. The total number under treatment was 1,303. There were 1,116 discharges and 61 deaths. 12 deaths occurred within 48 hours of admission. The gross fatality rate was 5·2 per cent., as against 6·8 during the previous year, or 4·2 excluding the 12 deaths referred to.

185 of the cases were diphtheria carriers and showed no clinical symptoms of the disease. The fatality rate when these cases are excluded is 6·2 per cent.

Tracheotomy was performed in 16 cases, as against 20 in the previous year. 37·5 per cent. were fatal, as against 40 per cent. in 1934.

The average stay in hospital of the patients who recovered was 38·4 days and for fatal cases 8·9 days. 230 cases certified diphtheria were found to be suffering from some other disease ; of these cases 9 proved fatal.

Intravenous Serum Treatment of Diphtheria.

Of 1,106 admissions 160 cases were so severe as to necessitate treatment with serum by intravenous injection. The following table illustrates the severity of this type of diphtheria :—

Total number of cases treated with intravenous anti-diphtheritic serum	..	..	..	..	..	..	..	160
Deaths	..	..	..	..	..	..	..	43
Case mortality	..	..	..	..	..	..	..	26.9 per cent.

Seven deaths occurred within 48 hours. If these are excluded the death rate = 23.5 per cent.

Fatal cases : Average day of disease on admission	..	3.6
Recovered cases :	..	3.5

FATAL CASES : DAY OF DISEASE ON WHICH DEATH OCCURRED.

Day	..	..	3rd	4th	5th	6th	7th	8th	9th	11th	12th
Cases	..	..	1	1	7	3	2	5	2	3	5

Day	..	..	13th	14th	15th	16th	20th	38th	41st	49th	..
Cases	..	..	2	4	1	3	1	1	1	1	..

The average number of days in hospital of the patients who recovered was 72.2 days.

Of the 117 patients who eventually recovered 40 (34.2 per cent.) suffered from post-diphtheritic paralyses. Of those who died there were 3 cases of pharyngeal paralysis, and 1 case of diaphragmatic paralysis (died 32nd day).

TABLE SHOWING PARALYSES AS THEY OCCURRED IN THOSE PATIENTS WHO RECOVERED.

Palatal paralysis	..	..	..	..	..	..	..	..	..	17
Palatal paralysis and strabismus	..	..	..	..	..	..	..	..	..	7
Palatal paralysis and facial paresis	..	..	..	..	..	..	..	..	..	4
Palatal paralysis, strabismus, and facial paresis	..	..	..	..	..	..	..	..	..	2
Palatal and ciliary paralysis and facial paresis	..	..	..	..	..	..	..	..	..	3
Ciliary paralysis	..	..	..	..	..	..	..	..	..	1
Pharyngeal paralysis	..	..	..	..	..	..	..	..	..	5
Hemiplegia	..	..	..	..	..	..	..	..	..	1

A preliminary intramuscular dose of between 30,000 and 60,000 units is usually given before an intravenous injection is made, when, according to the severity of the case, 60,000 units and upwards of super-concentrated serum is administered, supplemented by the intravenous injection of glucose.

Laryngeal Diphtheria.

The number of cases in which tracheotomy was necessary was 16, a decrease of 4 on the number of operations in 1934.

TRACHEOTOMY CASES.

	Cases	Deaths
Under 1 year .. .. .	..	..
1—2 years	2	1
2—3 „	4	1
3—4 „	2	..
4—5 „	3	1
5+ „	5	3
	<u>16</u>	<u>6</u>
Total	16	6
Mortality Rate	37·5 per cent.	

DIPHTHERIA CASES—992.
(excluding 185 carriers)

Age Incidence	Number	Percentage	Percentage Death Rate
0— 5 years	195	19·7	9·8
5—10 „	409	41·2	8·1
10—15 „	237	23·9	3·8
15—20 „	59	5·9	..
20+	92	9·3	..

COMPLICATIONS IN DIPHTHERIA.

Complication	Number	Percentage
Otitis media	63	6·4
Palatal paresis	56	5·6
Pharyngeal paralysis	8	·8
Facial paralysis	12	1·2
Diaphragmatic paralysis	1	·1
Cycloplegia	4	·4
Cardiac arrythmia	46	4·6
Bradycardia	16	1·6
Strabismus	23	2·3
Hemiplegia	1	·1
Ptosis	1	·1
Nephritis	1	·1

ACTIVE IMMUNIZATION AGAINST SCARLET FEVER IN DICK POSITIVE REACTORS
ADMITTED TO HOSPITAL SUFFERING FROM DIPHTHERIA.

Age	Total Tested	+ ve	Percentage + ve	—ve	Completely Immunized	Incompletely Immunized or not Retested on Discharge
0—1	9	5	55·6	4	—	5
1—2	18	14	77·8	4	—	14
2—3	29	15	51·7	14	5	10
3—4	18	11	61·1	7	3	8
4—5	36	22	61·1	14	7	15
5—10	170	88	51·8	82	20	68
10—15	99	53	53·5	46	11	42
15—20	24	12	50·0	12	2	10
20+	41	18	43·9	23	5	13
	444	238	53·6	206	53	185

ENTERIC FEVER GROUP.

In hospital at commencement of year	8
Admitted during the year.. ..	29
Incorrectly diagnosed	6
Remaining in hospital at end of year	3
Discharged	26
Died	2
Average day of disease on admission	14th
Average stay in hospital	48·4 days
Average age of patients	18·3 years

Other diseases admitted as Enteric Fever :—

? Neoplasm (lungs)	1 case	Recovered
Tabes mesenterica	1	„
Pleurisy	1	„
Enteritis	1	„
Unresolved pneumonia	1	„
Tuberculosis	1	Died

The type of disease in the cases discharged or died was as follows :—

Typhoid	23 cases
Paratyphoid	5 „

The complications were :—

Typhoid Fever—

Necrosis of jaw	I case (died)
Pneumonia	I „ „
Venous thrombosis	I „
Bronchitis	I „
Cystitis	I „

Paratyphoid Fever—

Nil.

ERYSIPELAS.

Two hundred and ninety-three cases were admitted, an increase of 46 on the previous year, and 250 cases were discharged. There were 32 deaths, giving a mortality rate of 11·3 per cent., as against 10·2 per cent. in the previous year.

There were 47 cases notified as erysipelas in which the original diagnosis had to be amended. The following is a list of the conditions in which alteration of the notified diagnosis had to be made :—

	Cases
Cellulitis.. .. .	16
Dermatitis	6
Erythema	3
Septic heel	2
Acute conjunctivitis	1
Septic focus, left cheek	1
Furunculosis.. .. .	3
Infected wound (leg)	1
Dental caries	1
Impetigo	1
Advanced cachexia, carcinoma pharynx	1
Varicose ulcer and dermatitis	1
Abscess nasal septum	1
Cheirpompholyx (feet)	1
Eczema	2
Intertrigo	1
Septic venous thrombosis	1
Herpes	4

During the year 1935 exposure to ultra-violet radiation continued to be employed as the routine treatment for cases of erysipelas, and the results of this method have been satisfactory.

The movable mercury-vapour lamp was used to procure effective irradiation of the skin adjacent to the edge of the area affected by erysipelas. This obviated the necessity for disturbing the patients or altering the position of the beds, and it eliminated local applications and bandages. A slight

modification of the previous technique was adopted, 30 inches being determined upon as the optimum distance, repeated exposures on successive days being given until the spread of the active edge was controlled by the erythematous barrier.

In cases showing evidence of marked toxæmia, antiscarlatinal serum by intramuscular injection has been administered in addition to the ultra-violet radiation.

MEASLES.

Two hundred and two cases of measles were admitted during the year 1935 and 149 were discharged. The majority of these cases occurred at the end of the year during the biennial measles epidemic of the winter of 1935-36, the figures for the latter part of which are consequently not included in this year's report.

Limited accommodation prevented the indiscriminate admission of all cases, and the cases sent for treatment were restricted to complicated attacks and children living under unhygienic home conditions. The incidence of complications and the case mortality is consequently higher than in cases receiving domiciliary treatment. Nineteen deaths occurred, giving a fatality rate of 11.3 per cent. Two of these deaths occurred within 24 hours of admission.

Broncho-pneumonia was the dominating lethal factor, accounting for 16 out of the 19 deaths, and contributed towards a fatal issue in two further cases.

Concurrent faucial diphtheria and laryngitis were contributory factors in one fatality. Broncho-pneumonia occurred in 36, or 21.4 per cent., of the cases.

Oxygen was administered by double nasal feed catheter method as a routine procedure, and proved of definite clinical value.

Fifty per cent. of all patients developing broncho-pneumonia succumbed to the attack. Over 90 per cent. of those surviving were further complicated by otitis media.

A somewhat exceptional feature was the comparatively high incidence of laryngitis among the cases admitted. Ten cases, or 5 per cent., of the admissions suffered from this complication in a more or less severe form. Tracheotomy was necessary in 3 cases, 2 of which survived and 1 proved fatal. The fatal case was complicated by broncho-pneumonia.

There were 26 cases of otitis media, 15.5 per cent., against 18.8 per cent. in the previous year. One mastoid operation was performed.

Enteritis occurred in 17 cases, or 10 per cent. of cases, 1 illness proving fatal.

Incorrect diagnosis was made in 4 cases, 2 of which were found to be scarlet fever, 1 cerebro-spinal meningitis, and 1 laryngeal diphtheria.

Seven adult patients volunteered as donors of convalescent measles serum, with which we have been able to maintain a sufficient supply during the year for the hospital use.

COMPLICATIONS IN MEASLES.

Complication	Survived	Died
Respiratory—		
Broncho-pneumonia	18	17
" " and laryngitis..	—	1
Laryngitis	9	—
Rhinitis.. .. .	7	—
Ears—		
Otitis media	26	—
Mastoiditis	1	—
Eyes—		
Corneal ulceration	2	—
Perforation of cornea	1	—
Hordeolum	6	—
Blepharitis	6	—
Alimentary—		
Enteritis	17	—
Skin—		
Whitlow	4	—
Impetigo	5	—
Miscellaneous—		
Tubercular Meningitis	—	1
Cervical adenitis	2	—
Suppurative parotitis.. .. .	1	—

WHOOPING COUGH.

Fifty-eight cases of whooping cough were admitted during 1935, as against 49 in the previous year. There were 11 deaths, giving a death rate of 19·0 per cent., as against 12·2 in 1934.

Age	Number of Cases	Deaths	Percentage Death Rate
Under 1 year	13	5	38·5
1 year	14	2	14·3
2 years	5	..	..
3 "	15	3	20·0
4 "	3	1	33·3
5 +	8	..	..
	58	11	19·0

The cause of death in the 11 fatal cases, 5 of whom were under 1 year of age, was as follows :—

Broncho-pneumonia	.. .. .	10 cases
Convulsions	.. .. .	1 case

The complications noted in the cases under treatment were as follows :—

Broncho-pneumonia	.. .. .	12 cases	= 20·7 per cent.
Rhinorrhœa	.. .. .	6 „	= 10·3 „
Enteritis	.. .. .	2 „	= 3·4 „
Impetigo	.. .. .	2 „	= 3·4 „
Hydrocephalus	.. .. .	1 case	= 1·7 „
Bronchitis	.. .. .	1 „	= 1·7 „
Convulsions	.. .. .	1 „	= 1·7 „

CEREBRO-SPINAL FEVER.

Forty cases of meningococcal meningitis were treated during the year. Of these, 17 died and 23 recovered, giving a fatality rate of 42·5 per cent. Eight patients died within 48 hours of admission, and, excluding these, the fatality rate from this disease was 28·1 per cent.

	No. of Cases	Male	Female	Died	Recovered	Case Mortality per cent.	
						Total	Excluding Deaths in 48 hours
Under 1 year ..	7	3	4	5	2	71·4	50
1 to 5 years ..	6	2	4	5	1	83·3	50
5 „ 10 „ ..	10	7	3	3	7	30	22·2
10 „ 20 „ ..	14	9	5	3	11	21·4	—
20+	3	1	2	1	2	33·3	—
	40	22	18	17	23	42·5	28·1

Average day of disease on admission to hospital :—

- Recoveries : 5th.
- Deaths : 6th.

Average day of disease on which death occurred : 10th.

Average number of punctures performed (lumbar, cistern, or ventricular):
6.

Average amount of serum administered to each case : 71 c.cs.

	Cases	Recoveries	Deaths	Fatality Rate per cent.
Polyvalent serum alone	4	1	3	75
Group I. serum alone	—	—	—	—
Combined polyvalent and Group I. serum	35	22	13	37·1

1 case, moribund on admission, received no serum.

The number of cases admitted shows an increase of 10 on the previous year.

The fatality rate has been still further reduced, to 28·1 per cent., as against 28·6 per cent. during 1934. This figure excludes cases dying within 48 hours of admission.

The aim of treatment is to combat the infection by the administration of antimeningococcal serum by various routes in sufficient quantity at as early a period as possible. There is continued indication that the disease is responding more favourably to treatment.

OTHER INFECTIOUS DISEASES.

The following table gives the admissions of other infectious diseases during the year :—

	Cases
Post-encephalitis lethargica	2
Rubella	24
Chicken-pox	8
Mumps	7
Pemphigus.. .. .	1
Poliomyelitis	2

During the period including the latter part of October, November, and the first week in December, a mild outbreak of dysentery occurred in the hospital. The cases were mainly confined to two wards, but occasional cases occurred in other wards. The number of cases was 45, 41 being patients and 4 nurses. There were no fatalities or severe illnesses.

The characteristic feature of the attack was frequent, relaxed, offensive stools. In 31 cases mucus was present in the fæces and in 18 of these blood was noted. Blood was present as streaks. Altered blood was not detected. In 9 cases the stools were green. In 22 cases there was a rise of temperature during the attack, the rise occurring on a few occasions before any change in the stools was noticed, and in others after the diarrhœa commenced. The temperature was elevated in most cases for one day only, but in 2 cases the temperature was elevated for 5 and 6 days respectively. The rise was over 100° in 5 of the 22 cases mentioned, 2 reaching 104°, 1 103°, 1 102°, and 1 101°.

In 4 cases only was abdominal pain a symptom. Vomiting in no case was a feature of the illness.

The organisms isolated in the cases examined were of the Sonn  type.

The original source of the outbreak was not determined.

BABIES' WARD (MALNUTRITION AND RICKETS).

The 8 cots of the Babies' Ward were fully occupied throughout the year. There were 13 admissions and 13 discharges.

TABLE SHOWING NUMBERS OF VARIOUS DISEASES TREATED.

	Remaining in Hospital, Jan. 1st, 1935	Admitted	Discharges and Deaths	Remaining in Hospital, Dec. 31st, 1935
Scarlatina	224	2,355	2,350	229
Diphtheria and Diphtheria Carriers	197	1,106	1,177	126
Enteric Fever Group ..	8	23	28	3
Erysipelas	12	293	282	23
Puerperal Fever & Pyrexia	16	169	176	9
Measles	1	202	168	35
Other Diseases	22	670	675	17
Total	480	4,818	4,856	442

POST-MORTEM EXAMINATIONS.

During the year 47 post-mortem examinations were performed.

Disease Notified	Post-mortem Findings
Diphtheria	Lobar pneumonia.
,,	Streptococcal septicæmia. Streptococcal tonsillitis.
,,	Streptococcal septicæmia. Streptococcal tonsillitis. Fatty degeneration of heart.
,,	Diphtheria.
,,	Diphtheria. Broncho-pneumonia.
Scarlet fever	Tuberculous meningitis.
,,	Scarlet fever. Broncho-pneumonia.
,,	Scarlet fever. Lobar pneumonia.
,,	Post-scarlatinal nephritis.
Post-scarlatinal nephritis ..	Measles. Broncho-pneumonia.
Erysipelas	Erysipelas. Acute endocarditis.
,,	Erysipelas. Generalised septicæmia.
,,	Erysipelas. Myocardial degeneration. (Two cases).
,,	Erysipelas. Frontal tumour.
,,	Erysipelas. Pneumonia.
,,	Cellulitis. Septicæmia.
,,	Generalised septicæmia. Septic venous thrombosis.
,,	Erysipelas. Advanced cachexia. Carcinoma pharynx.
Puerperal sepsis	Septic abortion.
,, ,,	Septic abortion. Broncho-pneumonia.
,, ,,	Puerperal sepsis. Streptococcal septicæmia. (Three cases).
,, ,,	Puerperal sepsis. Streptococcal septicæmia. Acute mastitis.
Puerperal pyrexia	Puerperal post-partum hæmorrhage. Pulmonary tuberculosis.
,, ,,	Puerperal septicæmia. Localised peritonitis.
,, ,,	Puerperal sepsis. Peritonitis.
,, ,,	Puerperal sepsis. Streptococcal septicæmia.
,, ,,	Puerperal sepsis. Peritonitis. Salpingo-öophoritis.

Disease Notified	Pest-mortem Findings
Septic miscarriage	Septic abortion. Pleurisy. Empyema. Ruptured pulmonary abscess.
Measles	Measles. Broncho-pneumonia. (Two cases).
„	Gastro-enteritis. Marasmus.
„	Measles. Tuberculous Meningitis.
Cerebro-spinal fever	Cerebro-spinal fever. (Four cases).
„ „	Streptococcal meningitis. Streptococcal tonsillitis.
Meningitis	Tuberculous meningitis.
Typhoid fever	Typhoid fever. Toxæmia.
„	Tuberculous meningitis. Colitis.
Encephalitis lethargica ..	Acute miliary tuberculosis.
Whooping cough.. .. .	Whooping cough. Broncho-pneumonia.
Admitted with puerperal mother	Cerebral contusion due to instrumental delivery.
Admitted with puerperal mother	Marasmus. Pyloric stenosis.

AURAL REPORT.

The total number of cases of otorrhœa occurring in the hospital during 1935 was 273, these being distributed as follows:—

In scarlet fever	174
„ measles	26
„ diphtheria	63
„ miscellaneous disease	10

During the year 155 cases were admitted for treatment to the special Aural Ward, 24 cases remaining at the end of the year.

(a) *Scarlet Fever.*

Among the 2,336 cases discharged and 14 deaths during 1935 there were 174 cases of otorrhœa, a case-incidence of 7·4 per cent.

Mastoid drainage was required in 18 cases, being an incidence of 0·8 per cent. of scarlet fever cases and 10·3 per cent. of cases of otorrhœa.

Of the total cases 136 were unilateral and 38 bilateral ; 30 of the cases were recurrences or exacerbations of chronic pre-scarlatinal otitis.

The average day of onset of otorrhœa was the twelfth and the average duration of otorrhœa was 37 days.

Anti-scarlatinal serum was administered to 24 of the cases (13·8 per cent.) on admission.

Of the cases 110 were females and 64 males.

Operations performed by the Aural Surgeons.

Mastoid drainage—

Unilateral	17
Bilateral	1

Mastoid Operations.

Among the 18 cases the average day of disease on which mastoid drainage was required was the 37th, and the average duration of otorrhœa after the operation was 56 days. Of the cases 11 were females and 7 were males.

(b) *Diphtheria.*

Among the 1,116 cases discharged and 61 deaths during 1935 there occurred 63 cases (5·4 per cent.) of otorrhœa.

Of these 47 were unilateral, 16 were bilateral, and 1 was a recurrence of pre-diphtheritic otitis.

Of the cases 25 were males and 38 were females.

(c) *Measles.*

Among the 149 cases discharged and 19 deaths during 1935 there occurred 26 cases (15·5 per cent.) of otorrhœa.

Of these 16 were unilateral and 10 bilateral. Of the cases 14 were males and 12 were females.

MISCELLANEOUS CASES IN WHICH OTORRHŒA OCCURRED.

Erysipelas	7
Broncho-pneumonia	2
Whooping Cough	1
Total	<u>10</u>

REPORT OF CASES TREATED IN THE BED ISOLATION WARD.

During the year 1935 630 cases were treated in the Bed Isolation Ward.

NATURE OF CASES.

	No. of Cases
Certified scarlet fever, no confirmatory symptoms	13
" " " diagnosis confirmed	68
" " " " doubtful	83
" " " rubella	11
" " " tonsillitis	15
" " " lobar pneumonia	2
" " " septic rash	1
" " " tuberculous meningitis	1
Scarlet fever and rhinorrhœa	87
" " " K.L.B. rhinitis	8
" " " " otorrhœa	2
" " " diphtheria.. .. .	8
" " " surgical conditions	20
" " " septic spots	3
" " " rubella	2
" " " bronchitis	2
" " " dermatitis	1
" " " impetigo	5
" " " nephritis	2
" " " pertussis	15
" " " otorrhœa	16
" " " enteritis	4
" " " vaginitis	2
" " " mumps	6
" " " ringworm	2
" " " impetigo and pertussis	1
" " " puerperal sepsis, and	1
baby with mother	1
Certified diphtheria, diagnosis not confirmed	20
" " " " confirmed	52
" " " diagnosed tonsillitis	5
" " " " laryngitis	1
" " " " gingivitis	1
" " " " scarlet fever	9

NATURE OF CASES—*continued.*

	No. of Cases
Diphtheria and scarlet fever	12
„ „ mumps	3
„ „ enteritis	1
„ „ late measles	2
„ „ surgical conditions	3
„ „ otorrhœa	5
„ „ pertussis	5
Erysipelas	1
„ and scarlet fever	2
„ „ pulmonary tuberculosis	1
Certified erysipelas, diagnosed dermatitis, chicken-pox, and K.L.B otorrhœa	1
Certified measles, diagnosis not confirmed	4
„ „ diagnosed rubella	3
„ „ „ enteritis	2
Late measles	32
„ „ and otorrhœa	3
Certified pertussis, diagnosis not confirmed	4
Pertussis	35
„ and rubella	2
„ „ pneumonia	4
„ „ convulsions	3
Rubella	17
Mumps	7
Pemphigus and convulsions	1
Anterior poliomyelitis	1
Chicken-pox, diagnosis not confirmed	1
Late chicken-pox	2
Purulent conjunctivitis	1
? Meningitis and broncho-pneumonia	1
Certified glandular fever, diagnosed tonsillitis	1
Total	630

During the year the isolation accommodation provided at the hospital proved inadequate to deal with the number of cases requiring special isolation. It has been found increasingly necessary to isolate certain complications which occur in the general wards so as to prevent their conveyance to others. A scheme has been put in hand for the conversion of a ward pavilion into separate cell accommodation, which will be a valuable contribution towards the efficient working of the hospital in providing special single bed isolation accommodation.

LABORATORY REPORT.

MICROSCOPICAL EXAMINATION OF CULTURES FOR B. DIPHTHERIA.

Source of Swab	Positive	Number Examined
Throat	865	12,432
Nose	942	13,120
Ears	334	2,342
Eyes	5	23
	2,146	27,917

A list is appended of the various specimens examined in the laboratory during the year :—

Fæces	365
Urine	556
Sputum	26
Cerebro-spinal fluid	90
Cervical and vaginal—	
Anærobic	60
Ærobic	278
Blood cultures—	
Anærobic	30
Ærobic	203
Pus cultures	57
Blood counts	30
Agglutinations	107
Direct smears	74
Miscellaneous	31

**ILLNESS OF NURSING STAFF NECESSITATING
WARD TREATMENT DURING 1935.**

Condition	Number of Cases	Days Warded
Diphtheria	8	255
Scarlet fever	2	68
Typhoid fever	1	68
Pulmonary tuberculosis	1	121
Mumps	4	58
Tonsillitis	23	220
Influenza	8	42
Influenza, otitis media, mastoidectomy ..	1	74
Catarrhal jaundice	2	34
Enteritis	6	57
Bacilluria	1	11
Constipation	1	7
Otitis media	1	8
Acute rheumatism	3	80
Subacute rheumatism	2	65
Migraine	3	20
Tinea of scalp	1	13
General and local reaction to A.S.P. and T.A.F.	1	4
Abscess of axilla	1	3
Alveolar abscess	1	12
Boils	2	8
Stye, right eye, and cellulitis eyelid	1	5
Pes planus	3	23
Appendicectomy adhesions	2	21
Tonsillectomy	1	56
Sprained ankle	2	17
Scalds and otitis media	1	17
Scalds, leg	1	14
Cut of hand	1	8
Burn of hand	2	13
Septic heel	1	2
Septic finger	1	11
	89	1,415

IMMUNIZATION OF NURSING STAFF.

During the year 114 nurses joined the hospital staff. All of these were tested for susceptibility to diphtheria and scarlet fever by the Schick and Dick tests. Twenty-five of the nurses were found to be Schick positive and 55 Dick positive.

All the nurses joining the hospital staff during the year were immunized against diphtheria, those found to be Schick negative being given two doses of toxoid antitoxin floccules and those found to be Schick positive being given three doses or more, depending upon the Schick test reading at the end of the third dose.

Fifty-five Dick positive nurses were immunized against scarlet fever.

Sixty-five nurses were inoculated against typhoid and paratyphoid fevers. Reactions were noted in 12 per cent.

PUERPERAL SEPSIS.

The number of admissions was 169, as against 171 in the previous year, showing a decrease of 2. 159 were discharged cured and 17 deaths occurred, giving a case mortality of 9.7 per cent., as against 7.2 per cent. during the previous year. Three deaths occurred within 48 hours of admission.

The average stay in hospital of those who recovered was 25.3 days, and of fatal cases, 11.9 days.

The average day of disease on admission to hospital was the fifth.

The cases may be classified as follows:—

Uterine sepsis following delivery at full time	85
Uterine sepsis following abortion	74
Pyrexia due to causes other than uterine sepsis ..	17

The conditions before death in the fatal cases are as follows:—

1. Septic abortion. Empyema. Pulmonary abscess.
2. Puerperal sepsis. Toxæmia.
3. Puerperal sepsis. Streptococcal septicæmia.
4. Septic abortion. Peritonitis. Salpingo ööphoritis.
5. Puerperal sepsis. Scarlet fever.
6. Puerperal sepsis. Pulmonary tuberculosis. Post-partum hæmorrhage.
7. Puerperal sepsis. Streptococcal septicæmia. Mastitis.
8. Puerperal sepsis. Bronchitis. Septicæmia.
9. Puerperal sepsis. Streptococcal septicæmia. Phlegmasia alba dolens.
10. Puerperal sepsis. Pelvic cellulitis.

11. Puerperal sepsis. Streptococcal septicæmia. Pleurisy.
12. Septic abortion. Pelvic peritonitis. Pneumonia.
13. Puerperal sepsis. Peritonitis.
14. Puerperal sepsis. Peritonitis. Salpingo ööphoritis.
15. Puerperal sepsis. Puerperal mania.
16. Septic abortion. Broncho-pneumonia.
17. Septic abortion. Septicæmia.

The case mortality from uterine sepsis was 11·2 per cent.

During the past year laparotomy was performed by the gynæcological surgeons in 11 cases. General peritonitis was present in 9 cases, of which 5 were fatal.

In 32 cases of septic abortion, manual removal of retained products of conception was necessary, and in one case posterior colpotomy was performed.

Complications.

Lacerated perineum 23	Mastitis 8
Pyelitis, vaginitis.. .. 1	Recto-vaginal fistula 3
Breast abscess 7	Puerperal mania 8
Phlegmasia alba dolens .. 12	Sub involution 1
Pleurisy 4	Ruptured vulvar vein 1
Pneumonia 7	Appendicitis 1
Salpingo ööphoritis 3	Rheumatism (acute) 1
Peritonitis 9	Erysipelas (face) 1
Parametritis 2	„ (perineum) 1
	Pyæmia 3

Bacteriology.

Hæmolytic streptococci were found with the following incidence :—

Present in the blood	12 cases (5 deaths)
„ „ vagina .. }	56 „
„ „ cervix .. }	
„ „ nose .. }	13 „
„ „ throat .. }	
„ „ gums .. }	

Strains of Streptococci occurring in Puerperal Fever.

The hospital has continued its co-operation with one of the research workers in the bacteriological laboratories of the University in the investigation of the strains of streptococci in puerperal fever.

ROSE HILL CONVALESCENT HOME.

REPORT FOR THE YEAR ENDED DECEMBER 31ST, 1935.

BY MISS A. BALL, MATRON.

I have pleasure in submitting the following report for the period 1st January, 1935, to the 31st December, 1935 :—

During the above period 776 patients were admitted, including 205 babies under 5 years of age, and 784 patients discharged. This shows an increase in admissions but a decrease in the number of maintenance days of 6,557 in comparison with the figures for 1934. Average number of beds occupied, 99.

Fifty-seven infectious cases were transferred to other hospitals for treatment.

There has been an increase of 20 convalescent heart and chorea cases, also an increase in the number of cases which require dressings.

Swabs sent for test to Delaunay's Road this year show a decided increase owing to the large number of sore throats.

Nursing staff :—

3 sisters.

3 assistant nurses.

7 nurse attendants.

3 junior nurses (16 to 18 years of age).

The junior nurses are now receiving a certain amount of training with a view to their transfer to other hospitals.

A new school curriculum has been instituted—The Project System—also the "Montessori" System for babies, which necessitated the appointment of a specially trained teacher.

A piano has been provided for the children's dining room, also a number of out-door games have been introduced, *e.g.*, putting green, basket ball, football and cricket, croquet, badminton.

A new floor has been laid in the children's playroom for indoor games, etc.

Scout and cub masters still continue to take interest in the boys.

A new cinematograph apparatus and screen have been provided for the children's in-door amusement and education.

Improvements made in the Home during the year are as follows :—

The new lavatory and bath house now completed.

A new cloak room provided for the boys.

A large portion of the interior of the Home has been redecorated.

WITHINGTON HOSPITAL.

REPORT FOR THE YEAR ENDED 31ST DECEMBER, 1935.

BY DR. M. GAMBLE, MEDICAL SUPERINTENDENT.

General.

The work of the hospital further increased during 1935, every section being affected by the extra admissions, which were 644 above last year's total.

The accommodation available has been reduced to 1,144 adult beds by reason of alterations to the new surgical wards, and it appears that it will remain at this number for a considerable time. As there are 36 wards in the Hospital it seems likely that one of them will always be in the hands of the workmen.

As we have no control over admissions they fluctuate very greatly, and all sections of the Hospital have been sorely overcrowded at some period of the year. The male post-encephalitics were transferred to the Institution early in the year and this liberated a ward for acute cases. A similar step is being taken with the female cases of similar type, and when the accommodation in the annexe is available a further ward will be free for general cases.

The medical staff was increased by two during the year and now totals ten residents in addition to the Medical Superintendent. The first appointment was necessitated by the opening of the casualty ward, whilst an assistant to the resident obstetrical officer was appointed later in the year.

Some difficulty was experienced in securing adequate nursing staff, particularly probationers, and it is felt that more and better accommodation should be provided for nurses, together with a preliminary training school. This latter scheme has been postponed for a considerable time, but for a hospital of this size the need of a preliminary training school cannot be overstressed.

Admission Block.

A pressing need of the hospital is the provision of an admission block. When this unit is built it will enable all cases to be seen before being warded.

When it is realised that as many as 70 admissions are dealt with in one day the necessity for the block will be seen. It will enable a proper allocation of patients to suitable wards to be made at the time of admission, and is also the only practical safeguard against the admission of infectious diseases to general wards.

Signalling System.

Owing to financial stringency the scheme for a signalling system for the medical staff has been postponed, and great inconvenience and much waste of time have been the results. In a large hospital like this, covering as it does some 50 acres, such a system is absolutely essential.

Clinical Laboratory.

The need for a clinical laboratory and full-time pathologists grows more acute each year. The present system of all specimens being examined at the Crumpsall laboratory often means great delay and inconvenience, and on occasion, damage of the specimens in transit.

The staff has been handicapped, particularly at the week-ends, when reports of an urgent character have been delayed for two or three days.

The present accommodation is entirely unsuited for the purpose, and a new laboratory of adequate size and centrally situated is essential to the efficient working of the hospital.

Casualty Ward.

A notable feature of the year was the inauguration of a casualty ward in February, when the dining hall adjoining pavilion II was converted into an up-to-date receiving ward, capable of dealing with all types of accidents. Details of this ward are given in a subsequent article.

Obituary.

It is with regret that I record the death in March of Mr. G. B. Warburton, Consulting Surgeon, a position he had held for 13 years.

Mr. Warburton will always be remembered by the efficiency and kindness which he displayed in all his dealings with the staff and patients.

I also regret to report that a probationer nurse died from broncho-pneumonia.

Maternity.

The maternity section received much attention during the year, 8 additional nurses being appointed to the wards and an assistant resident obstetrical officer was added to the staff. Permission was received from the Central Midwives Board to increase the number of nurses training for the C.M.B. Certificate from 24 to 33, and a third district midwife was appointed to train the pupils in district work. The preliminary arrangements were also completed for the holding of post-natal clinics in January, 1936.

Two instruments for the self-administration of an analgesic for patients in labour were purchased during the year and proved very successful.

Seven sessions are held at the ante-natal clinic each week, and 2,231 expectant mothers paid 9,796 attendances.

The number of deliveries totalled 2,124, an increase of 102 on the previous year and 894 on 1930.

There were 12 deaths in the maternity department during the year. On analysing the cause of death it was found that in three cases a serious heart condition contributed to death, in another the foetus formed in the tubes, whilst a fifth patient suffered from anæmia and died before she was delivered. It is interesting to note that only five were regularly attending the ante-natal clinic at the hospital prior to confinement. Of the remainder, three had not visited at all, two were admitted on their first attendance, one refused to be admitted on first attendance, whilst the other one booked the bed only five days before delivery.

Medical.

The treatment of gastric ulcers by an injection of a preparation of histidine was commenced during the year, with very satisfactory results. The patients can take a normal light diet and are not kept in bed. In many cases, after the preliminary investigations have been completed, patients have been able to continue their work attending once daily for their injection treatment. An X-ray examination is booked for them at the end of approximately four weeks, so that the patients are admitted to hospital and X-rayed immediately. The patients thereby spend only 7 to 10 days in hospital as opposed to 5 weeks under the old method of treatment.

A recording spirometer for basal metabolic rate estimation was purchased and has enabled us to treat many more patients in a more scientific manner than before. Although the time to carry out the investigation has been reduced from about three hours to half-an-hour, the results are much more accurate, and many more requests for the tests are now being made.

Surgical.

The general increase in the hospital work is well reflected on the surgical side. The number of abdominal sections performed during the year was practically double those done in 1934. The opening of the new theatre block with its adequate staff and equipment will afford a welcome relief from the present congested state.

As a pre-operative measure, continuous blood transfusions have been used with success, one pint of blood being taken from each of four donors and given slowly in to a vein of the patient.

A case of progressive post-operative cutaneous gangrene was reported in the British Journal of Surgery. This was one of the three successes out of a total of five cases recorded in Great Britain.

X-ray Department.

A very great increase is reported in the work of this department, no fewer than 4,874 examinations being made in the twelve months. This shows an increase of 1,708 (55 per cent.) over 1934, which was a record year in the history of the hospital.

The increase can be attributed in some measure to the casualty ward admissions, many of which require two examinations—before and after plastering—but many more requests for X-ray as an aid to diagnosis are now being made.

To cope with the additional work a second radiologist has been temporarily engaged and the sessions per week have been increased from four to seven. Until this step was taken patients awaiting X-ray examination were remaining in hospital longer than would otherwise have been necessary.

Physio-therapy Section.

There was a further increase in the number of after-care patients receiving physio-therapy, 622 patients being treated as compared with 552 last year. 15,643 treatments were given to in-patients, who made 9,418 attendances.

There are five sessions weekly for after-care patients, one being devoted to orthopædic cases who see the consulting orthopædic surgeon for inspection, removal and renewal of plasters, etc. An interesting feature of the after-care work is the children's section, where infants born in the maternity wards are treated for congenital deformities, consisting in the main of talipes. Treatment is commenced as early as possible, often on the day of birth, and the mother, as soon as she is well enough, is taught to co-operate with the masseuse. The infants attend twice weekly.

In the Sunlight Department, in addition to the usual type of cases such as boils, carbuncles, etc., several erysipelas cases have been treated. There have been a number of these cases admitted during the year owing to the accommodation at Monsall Hospital being insufficient.

The convalescent period of many such cases as pneumonia and bronchitis has been shortened by the application of ultra-violet light, and this has helped in patients vacating their beds earlier than would otherwise be the case, an important factor in the overcrowded state of the hospital. 235 after-care patients received 3,839 treatments in the sunlight department, whilst 3,660 treatments were given to in-patients.

The lack of cloakroom accommodation in this department is emphasised still more each year as the attendances increase.

Alterations, etc.

The renovations carried out to pavilion II necessitated us closing the hospital down to private patients—other than maternity cases—for three months. Many improvements were carried out both to the wards and operating theatre, and it is now possible to wheel a bed from ward to ward or into the theatre.

The alterations to the west side of No. 4 Nurses' Home have been completed, and the accommodation has been made as attractive and comfortable as possible.

Refrigerators were installed in pavilion 7 in accordance with the policy of the Committee.

The first of the new surgical wards was opened during the year, and is being used for orthopædic cases. Rubber flooring, rebuilt sanitary annexes, modernised kitchens and wireless to each bed are but a few of the many provisions which have been made. Still more improvements will be carried out in the remaining wards.

Other schemes have also been approved, but as the necessary money has not been available the commencement of the work has been deferred until the coming financial year.

Nursing Staff.

As previously mentioned, difficulty was experienced in securing suitable probationers, although two or three affiliations with other hospitals are in course of completion.

In order that our probationers should receive instruction in the nursing of children the General Nursing Council were given an assurance that all our nurses would receive a course of training in this branch of nursing at Booth Hall Hospital before sitting for their final examination.

A ward sister was successful in securing her house-keeping certificate.

Ninety-nine members of the nursing staff lost 2,912 days through sickness, or an average of 30 days each, whilst 10 domestic staff went off sick during the year, the average period of incapacity being 21 days.

Almoner's Department.

The following report has been received from the Hospital Almoner:—

“From each according to his means, and to each according to his necessity” is perhaps the simplest way of summing up the work of this department.

An almoner was appointed here in 1933, primarily with a view to recovering the cost of the out-patient treatment, either by assessing the patients themselves or by making claims under the Road Traffic Acts, or from Hospital Contributory Schemes.

These duties still continue, but as an almoner is fully trained in medico-social work, it was natural that in discussing with the patients their financial circumstances the question of their needs loomed larger in many cases than their ability to pay. Thus the opportunity for doing social work arose, and has developed so much during the last year that it is this aspect of the almoner's department which is now considered the most important.

To enable each patient to benefit to the fullest extent from hospital treatment is the ideal ; where the home circumstances make it impossible for the doctor's recommendations to be carried out or are in any way detrimental to recovery, the almoner offers her assistance.

It may be a question of arranging convalescent treatment after a serious illness, or obtaining a grant to pay the fares for those who have to attend regularly, or boots for a man who is attempting to recover from rheumatism in leaky footwear. An escort can be arranged for a child whose mother cannot bring it ; assistance given with the cost of a surgical appliance ; or extra nourishment supplied to those who cannot meet the cost of an invalid diet.

Other problems, less tangible, are more difficult to solve. Friction, misunderstanding, or indifference at home are often obstacles to the recovery of health, but sometimes a friendly visit or interview with the patient's family is enough to make their outlook more sympathetic. The finding of suitable employment for those who are incapacitated is another difficult task.

The Almoner has no funds directly at her disposal, but acts as a liaison officer between the hospital patient and the many agencies in the outside world, deciding which is the most appropriate source of help for each individual. For those already in receipt of out-door relief, assistance is usually obtained through the Relieving Officer ; and there follows a list of the many voluntary societies to which patients have been referred and for whose co-operation thanks are due :—

Approved Societies.

British Legion and United Services Fund.

British Red Cross Society.

City League of Help.

Cotton Districts Convalescent Fund.

Cripple Children's Help Society.

District Provident Society.

Diocesan Association for Preventive and Rescue Work.

Elderly Nurses Fund.

Invalid Children's Aid Association.

Mental Welfare Association.

Manchester Union of Girls' Clubs.

Surgical Aid Society.

Voluntary Unofficial Aunts.

So far this work has been chiefly confined to those attending as out-patients, but the number of cases in the wards referred to the Almoner by the medical staff is increasing, and it is hoped that in time the services rendered by this department will become more comprehensive.

Assessment of Out-patients.

Total number seen	.. .. .	2,105
Paying part cost of treatment..	.. .. . 39 per cent.	
Unable to pay	.. .. . 36	„
Contributing to Hospital Funds	.. .. . 21	„
Motor accident cases and others	.. .. . 4	„

Receipts.

	£	s.	d.
Patients' payments	175	4	7
Grants from Hospital Funds	105	6	0
Grants for surgical appliances	15	8	3
Motor accident and other claims	218	4	0
Total	514	2	10

Number
of Cases

Figures Relating to Social Work.

Convalescent treatment arranged (at no cost to the Corporation)	.. .. .	142
Grants obtained for surgical appliances..	.. ..	13
Grants obtained for fares	.. .. .	11
Clothing supplied..	.. .. .	10
Escorts arranged	.. .. .	3
General help and extra nourishment obtained	.. ..	8
Enquiries from outside societies answered	.. ..	10
Other forms of help	.. .. .	2

Examples of Cases dealt with.

A woman, recently widowed, was admitted to the hospital with a broken arm and subsequently attended for treatment as an out-patient. She found it increasingly difficult to afford the fares three times a week and could not make ends meet, but was loth to apply to the Public Assistance Committee. It transpired that before marriage she had been a State registered nurse. An application was therefore made to the Elderly Nurses Fund and a substantial grant obtained, which tided her over until her arm had recovered, and she was able to supplement her income by practising once more as a midwife.

An engineer, Maltese by birth, who had had to give up his work in London owing to failing eye-sight, drifted to Manchester and was admitted to hospital. He had no friends or prospects and nowhere to go on discharge. His sight had become so poor that the Almoner referred him to the Blind Aid Society for investigation. He was found to be eligible for a blind pension, and is now living in rooms under the supervision of the Society.

A girl who had been attending the physio-therapy department for three years for treatment of a tuberculous spine was told by the surgeon that she could attempt a light job if it could be found. As she would have had little chance of success if she had had to compete in the open labour market the Almoner put her into touch with the Cripples' Help Society, who found her suitable employment within a month.

A mother and child were both attending for treatment in the physio-therapy department when it became necessary for the woman to be re-admitted to hospital for a further operation. She was very distressed at the prospect, as it meant there was no-one to bring the boy up for treatment, from which he was just beginning to show the benefit. Through the Almoner, the " Voluntary Unofficial Aunts " came to the rescue, and the child has since been brought regularly by one of their workers in a car. The woman is now at home once more, and a weekly grant for extra nourishment has been obtained through the Unemployment Assistance Board.

Casualty Department.

As previously mentioned, a new casualty ward was opened on the 1st February, 1935.

Four examination cubicles and four beds, in addition to a small theatre, were provided. As there is no covered way connecting this ward with the main building, electrically heated blankets are used in conjunction with covered trolleys to ensure that the patients are not adversely affected should they require to be admitted to the hospital.

Some difficulty was encountered in forming a reliable estimate of the number of cases likely to receive treatment, but the Chief Constable suggested that the police force would probably bring in about 300 cases per annum.

An examination of the statistics for the 11 months of 1935 shows that 343 cases were brought in by the police, and that the total number of casualties treated was 1,227. 16 patients were dead on admission.

An interesting fact is that the number of males treated was more than double the number of females.

It is pleasing to note that 986 cases were able to go home within 12 hours of admission. 146 were admitted to the wards of the hospital. Of the 54 cases transferred to other hospitals, the majority were children.

Day of week admissions.

Sundays	.. .. .	122
Mondays	.. .. .	209
Tuesdays	.. .. .	168
Wednesdays	.. .. .	162
Thursdays	.. .. .	168
Fridays	.. .. .	198
Saturdays	.. .. .	200

Discharge details.

Discharged within twelve hours	.. ..	986
Detained over twelve hours	.. ..	37
Transferred to Withington Hospital	..	146
Transferred to other hospital	.. ..	54
Died in casualty ward	.. ..	4

Road accidents involving motor vehicles 146

Class.

Pedestrians, etc.	.. .. .	55
Motorists	.. .. .	26
Cyclists	.. .. .	49
Passengers	.. .. .	16

Four-hourly incidence of admissions.

Midnight—4-0 a.m.	.. .. .	6
4-0 a.m.—8-0 a.m.	.. .. .	2
8-0 a.m.—12-0 noon	.. .. .	23
12-0 noon—4-0 p.m.	.. .. .	29
4-0 p.m.—8-0 p.m.	.. .. .	47
8-0 p.m.—12-0 midnight	.. .. .	39

Discharge details.

Discharged within 12 hours	.. .. .	76
Detained over 12 hours	.. .. .	15
Transferred to Withington Hospital	..	48
Transferred to other hospital	.. ..	5
Died in casualty ward	.. .. .	2

Road accidents not involving motor vehicles (<i>e.g.</i> , cyclists' skids, pedestrians' falls)	146
Industrial accidents	203
Domestic accidents	467
<i>Age groups.</i>	
0—5	89
6—10	64
11—15	59
16—25	54
26—40	90
41—50	60
51—60	19
61—70	19
71—80	12
Over 80	1
<i>Day of week totals.</i>	
Sunday	42
Monday	82
Tuesday	77
Wednesday	56
Thursday	68
Friday	76
Saturday	66
Sports accidents	50
Accidents to children at play	29
Attempted suicide	7
Other accidents	63
Sudden illness	118
In street	76
At home	30
Elsewhere	12
Brought in dead	16

CRUMPSALL INSTITUTION.

REPORT FOR YEAR ENDED 31ST DECEMBER, 1935.

BY MR. F. O. SCHOFIELD, MASTER.

I have pleasure in submitting the following report of improvements, etc., carried out at this institution during the year 1935 :—

1. The new chiropodial clinic was established and during the year the chiropodist treated 153 patients. The total number of treatments given was 10,430.

2. The new dressing station for minor illnesses, accidents, etc., to inmates was established and the practice of sending these cases over to the adjacent hospital for examination and treatment was discontinued. During 1935 1,756 inmates were examined by a medical officer in the new station.

3. Renovations, alterations, and additions have been completed as follows :—

New lavatories and wash-basins and a new dressing room in female mental "C" block.

New lavatories and wash-basins in infirm men's "C" block.

Institution church renovated, including renewals and repairs to organ.

New vestry and new lectern provided.

New dining rooms for laundry workers and other non-resident staff provided.

Mental wards and other departments redecorated.

Electric truck purchased for transport of laundry, etc., between departments, thus obviating the use of inmate labour for this work.

New office provided for matron.

The work of the institution has proceeded smoothly during the year. The usual statistics relating to patients treated in the mental wards will be found on page 92.

WITHINGTON INSTITUTION.

REPORT FOR YEAR ENDED 31ST DECEMBER, 1935.

BY MR. W. H. WOODHALL, MASTER.

I have the honour to report that during 1935 the following improvements, etc., were carried out:—

1. "H" Home, containing 125 beds, was converted for the use of chronic sick patients transferred from the hospital. The male post-encephalitis patients transferred have settled down and are very comfortable in their new environment. Every effort is made to occupy their minds and to provide them with good facilities for recreation.

2. At the entrance to the institution, roads and paths have been reconstructed, hedges removed, and the area opened out in a manner which has improved the appearance of the institution very considerably. The planting of flowering trees and shrubs has materially assisted in making the approach to the homes much more cheerful than before.

3. A new washing machine has been installed in the institution laundry and the quality and output of the laundry work has been very satisfactory.

4. The reconstruction and modernisation of "E" Home was commenced. This home will accommodate 100 female chronic patients from the hospital when it is completed.

The work of the institution has proceeded on the usual lines and the staff continue to perform their duties with efficiency and with a high standard of personal regard for those placed in their charge. The statistics relating to patients treated in the sick wards will be found on page 92.

SWINTON HOME.

REPORT FOR YEAR ENDED DECEMBER 31ST, 1935.

BY MR. J. S. KOLTER, STEWARD.

I have pleasure in submitting the following report for the year ending December 31st, 1935:—

There were 137 children in the Home on January 1st, 1935, and the number remaining on December 31st, 1935, was 112.

An important change in the administration of the Home was the certification of the children under the Mental Deficiency Acts. The first group of 8 children were certified on April 8th, 1935, and the total number now certified is 43. To carry out the order of the Board of Control, separate books and forms have to be kept in addition to the existing books now in use.

A further 79 children remain to be certified to complete a total of 122.

Towards the end of the year an epidemic of measles broke out in the Home. This somewhat curtailed the usual Christmas festivities, but the children who were not affected had a very good time.

Children's Recreation.

During the summer months the boys have been taken for long walks through different parts of the district, viz.: Clifton Woods, Worsley Dam, Barton Bridge, and the new East Lancashire Road, etc., are some of the places visited.

By kind permission of the Secretary of the Swinton Rugby Football Club I have been able to take a party of boys to see the football matches.

The girls have also been taken out by the nurses to various places. These little outings have improved the atmosphere of the Home and facilitated administration.

Alterations.

The piece of land adjoining the Home, which was cleared of weeds and laid out in grass in 1934, proved its worth during the summer months as a playground for the children—a change from the concrete yard.

The washing arrangements have been greatly improved by the provision of new wash basins and a new hot and cold water mixer.

The girls' day-room floor has been relaid with rubber.

The isolation room on the girls' side which had a separate entrance from the wards has been altered. The entrance now is direct from the wards. A great improvement in the continuity of the nursing and supervision of the children has thus been effected.

A new concrete floor has been laid down in the boys' playing shed; this will prove a boon in wet weather.

Staff.

Mr. P. Sheridan, Schoolmaster, retired in November, having reached the age of 65 years.

The nursing staff continue to do good work and take much personal interest in the children's welfare.

Our only change in this department occurred in November when a nurse resigned to get married; she had been here for six years.

TABLE IX.

CLASSIFICATION (ACCORDING TO DISEASES) OF PERSONS WHO WERE DISCHARGED FROM, OR WHO DIED IN THE MUNICIPAL GENERAL HOSPITALS DURING THE YEAR ENDED DECEMBER 31st, 1935.

Disease Group	Disease	Booth Hall Hospital			Crumpsall Hospital			Withington Hospital			Totals	
		Children under 16		Men and Women	Children under 16		Men and Women	Children under 16		Men and Women		
		Dis.	Died		Dis.	Died		Dis.	Died			
INFECTIOUS DISEASE	Enteric Fever	3	—	—	—	—	—	—	—	4	1	8
	Smallpox	—	—	—	—	—	—	—	—	—	—	—
	Measles	127	30	—	—	—	—	—	—	—	—	159
	Scarlet Fever	9	—	1	—	2	—	1	—	2	—	13
	Whooping Cough	73	2	—	—	—	—	—	—	—	—	77
	Diphtheria	11	2	—	—	—	—	—	—	—	—	15
	Influenza	22	—	—	—	—	—	—	—	—	—	22
	Influenzal Pneumonia	—	1	—	—	—	—	—	—	100	2	210
	Dysentery	—	—	—	—	8	5	—	—	16	6	36
	Erysipelas	5	—	—	—	7	—	—	—	19	3	34
	Poliomyelitis	2	—	—	—	1	—	—	—	2	—	5
	Acute Lethargic Encephalitis	—	—	—	—	—	—	—	—	—	—	—
	Cerebro-spinal Fever	23	1	—	—	3	1	—	—	3	—	2
	Anthrax	—	—	—	—	—	—	—	—	1	—	1
	Tetanus	—	—	—	—	—	—	—	—	—	—	2
	Tuberculosis—	—	—	—	—	—	—	—	—	—	—	—
	Pulmonary, Thoracic, and Respiratory System	19	18	—	—	81	20	—	—	562	232	932
	Bones and Joints	16	—	—	—	11	4	—	—	52	4	87
	Abdominal Peritonitis	11	2	—	—	3	1	—	—	6	1	24
	Peripheral Glands	5	—	—	—	1	—	—	—	3	—	9
	Meningitis and Brain	1	12	—	—	—	2	—	—	—	8	23
	Skin (Lupus)	—	—	—	—	—	—	—	—	3	1	4
	Urino-genital	—	—	—	—	—	—	—	—	6	2	8
	Toxituberculide	—	—	—	—	—	—	—	—	—	—	—
	Bazin's Disease	—	—	—	—	—	—	—	—	—	—	—
	Ulceration of the Skin	—	—	—	—	—	—	—	—	1	—	1
	Empyema	—	—	—	—	—	—	—	—	—	—	—
	Fistula	—	—	—	—	—	—	—	—	—	—	—
	Soft Palate	—	—	—	—	—	—	—	—	—	—	—
	Other sites and ill-defined	1	—	—	—	7	1	—	—	7	—	16
	Syphilis—Congenital	4	—	—	—	3	—	—	—	2	—	12
	Acquired	—	—	—	—	—	—	—	—	—	—	—
	Gonorrhœa	6	1	—	—	91	4	—	—	6	—	103
	Gonorrhœal Ophthalmia	—	1	—	—	120	1	—	—	5	—	133
	Other Venereal Disease	—	—	—	—	—	—	—	—	—	—	2
	Undulant Fever	—	—	—	—	—	—	—	—	—	—	5
	Purulent Infection, Septicæmia (but not Puerperal)	—	1	—	—	—	3	—	—	—	1	6
	Malaria	1	—	—	—	1	—	—	—	2	—	4
	Hydatid Cysts	—	—	—	—	—	—	—	—	—	—	—
	Mycoses	—	—	—	—	—	—	—	—	—	—	—
	German Measles	9	—	—	—	—	—	—	—	—	—	—
	Chickenpox	16	—	—	—	—	—	—	—	—	—	10
	Mumps	10	1	—	—	—	—	—	—	1	—	17
	Memphigus Neonatorum	—	—	—	—	—	—	—	—	—	—	11
	Other Infectious Diseases	12	—	3	—	2	—	—	—	1	2	3
	TOTALS	386	72	6	6	—	434	3	1	809	261	2,022

Disease Group	Disease	Booth Hall Hospital				Crumpsall Hospital				Withington Hospital				Totals
		Children under 16		Men and Women		Children under 16		Men and Women		Children under 16		Men and Women		
		Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	
DISEASES OF NERVOUS SYSTEM AND SENSE ORGANS, OTHER THAN ENCEPHALITIS LETHARGICA	Cerebral Abscess	1	1	—	—	—	—	—	—	—	—	1	1	6
	Encephalitis, including Chronic Encephalitis Lethargica	1	1	—	—	—	—	—	—	—	—	43	7	79
	Meningitis, other than Tuberculosis	4	3	—	—	—	—	—	—	—	—	2	7	22
	Tabes Dorsalis	—	—	—	—	—	—	—	—	—	—	13	3	29
	Disseminated Sclerosis	—	—	—	—	—	—	—	—	—	—	17	3	26
	Other Diseases of Spinal Cord	1	—	—	—	—	—	—	—	—	—	9	5	28
	Cerebral Hemorrhage, Embolism, and Thrombosis..	—	1	—	—	—	—	—	—	—	7	123	170	450
	General Paralysis of the Insane	—	—	—	—	—	—	—	—	—	—	5	—	13
	Senile Dementia	—	—	—	—	—	—	—	—	—	—	13	6	63
	Other forms of Insanity	1	—	—	—	—	—	—	—	—	—	19	—	140
	Epilepsy	5	1	—	—	—	—	—	—	—	—	34	2	118
	Infantile Convulsions	18	6	—	—	—	—	—	—	—	—	—	—	24
	Hysteria and Hystero-epilepsy	—	—	—	—	—	—	—	—	—	—	12	—	29
	Neurasthenia	1	—	—	—	—	—	—	—	—	—	193	1	430
	Mental Deficiency (including idiocy, imbecility, and Mongolism)	6	2	—	—	—	—	—	—	—	—	8	—	24
	Other Disease of Nervous System (other than chorea, sciatica, and rheumatic neuritis)	10	—	1	—	—	—	—	—	—	—	88	8	184
	Diseases of Eye	42	2	—	—	—	—	—	—	—	—	17	1	83
	Diseases of Ear and Mastoid Sinus	183	10	—	—	1	—	—	—	1	—	52	4	282
	TOTALS	273	27	1	—	1	—	732	121	1	7	649	218	2,030
DISEASES OF CIRCULATORY SYSTEM	Pericarditis	2	1	—	—	—	—	—	—	—	—	1	1	8
	Endocarditis	21	2	—	—	—	—	—	—	—	—	21	7	72
	Valvular Disease of Heart	6	—	—	—	1	—	27	12	1	—	76	31	156
	Diseases of Myocardium	—	1	—	—	—	—	99	14	—	—	132	198	548
	Diseases of Coronary Arteries; Angina Pectoris	—	—	—	—	—	—	5	7	—	—	3	1	16
	Other Diseases of Heart	15	8	—	—	—	—	65	33	—	—	48	31	200
	Aneurysm	—	—	—	—	—	—	5	1	—	—	4	3	13
	Arterio-sclerosis and Other Diseases of Arteries	—	—	—	—	—	—	9	11	—	—	32	13	65
	Varicose Veins, including hæmorrhoids	1	—	—	—	—	—	64	—	—	—	68	1	134
	Other Diseases of Veins	1	—	—	—	—	—	12	—	—	—	10	1	33
	Diseases of Lymphatic System	73	4	—	—	—	—	17	—	—	—	20	6	121
	Abnormalities of Blood Pressure	—	—	—	—	—	—	32	3	—	—	52	8	95
	Other Diseases of Circulatory System	7	1	—	—	—	—	18	1	—	—	25	3	55
	TOTALS	126	17	—	—	1	—	362	203	2	—	501	304	1,516

DISEASES OF
RESPIRATORY
SYSTEM

Diseases of Nose and Larynx	1	1	—	—	—	—	1	—	—	—	35	—	—	—	—	—	50	2	122
Bronchitis...	17	—	—	—	—	—	—	—	—	—	499	—	—	—	—	—	430	83	1,342
Bronchiectasis	—	—	—	—	—	—	—	—	—	—	8	—	—	—	—	—	24	4	55
Broncho-pneumonia	46	—	—	—	—	—	—	—	—	2	32	2	—	—	—	—	54	63	384
Lobar Pneumonia	18	—	—	—	—	—	—	—	—	1	159	1	—	—	—	—	152	74	768
Other Pneumonia	1	—	—	—	—	—	—	—	—	—	21	—	—	—	—	—	16	19	78
Empyema	4	—	—	—	—	—	—	—	—	—	8	—	—	—	—	—	6	4	39
Pleurisy	1	—	—	—	—	—	—	—	—	—	23	—	—	—	—	—	58	2	88
Pulmonary Embolism	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	3	1	6
Asthma	—	—	—	—	—	—	—	—	—	—	25	1	—	—	—	—	53	4	85
Other Diseases of Respiratory System	6	—	—	—	—	—	—	—	—	—	45	—	—	—	—	—	176	25	315
TOTALS	94	1	—	—	—	—	3	4	—	—	856	3	3	1	—	—	1,022	281	3,282

DISEASES OF
DIGESTIVE
SYSTEM

Diseases of Teeth and Gums	1	1	—	—	—	—	—	—	—	—	78	—	—	—	—	—	82	—	212
Vincent's Angina	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	1	—	9
Other Diseases of Tonsils (tonsillitis, etc.)	7	6	—	—	—	—	2	—	—	—	139	—	—	—	—	—	206	1	1,704
Other Diseases of Mouth, Pharynx, and Esophagus	—	—	—	—	—	—	—	—	—	—	14	—	—	—	—	—	21	2	47
Ulcer of Stomach and Duodenum	—	—	—	—	—	—	—	—	—	—	128	—	—	—	—	—	202	13	351
Other Diseases of Stomach (excluding tumours)	5	—	—	—	—	—	1	—	—	—	137	—	—	—	—	—	161	6	330
Diarrhoea and Enteritis	22	—	—	—	—	—	18	—	—	1	14	—	—	—	—	—	16	2	158
Appendicitis	5	2	—	—	—	—	1	—	—	—	174	—	—	—	—	—	202	8	484
Hernia	2	—	—	—	—	—	—	—	—	—	157	—	—	—	—	—	119	8	309
Intestinal Obstruction	3	1	—	—	—	—	—	—	—	—	14	—	—	—	—	—	24	20	81
Constipation and Other Diseases of Intestine	—	—	—	—	—	—	—	—	—	—	102	—	—	—	—	—	161	1	321
Cirrhosis and Other Diseases of Liver, Diseases of Gall	—	—	—	—	—	—	—	—	—	—	58	—	—	—	—	—	109	13	194
Bladder and of Pancreas	1	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	8	7	28
Peritonitis (non-tuberculous and without stated cause)	3	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	4	—	7
Fistula in Ano	—	—	—	—	—	—	—	—	—	—	10	—	—	—	—	—	8	—	18
Ischio Rectal Abscess	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS	49	10	—	—	—	—	22	1	—	—	1,034	3	3	—	—	—	1,324	81	4,253

NON-VENEREAL
DISEASES OF
GENITO-URINARY
SYSTEM

Acute Nephritis	4	—	—	—	—	—	—	—	—	—	12	—	—	—	—	—	10	3	56
Chronic Nephritis	—	—	—	—	—	—	—	—	—	—	7	—	—	—	—	—	23	15	52
Pyelitis (including peri-nephritic abscess)	—	1	—	—	—	—	1	—	—	—	19	—	—	—	—	—	60	5	95
Other Diseases of Kidney	—	—	—	—	—	—	—	—	—	—	35	—	—	—	—	—	70	16	147
Diseases of Bladder and Urethra	—	—	—	—	—	—	—	—	—	—	71	—	—	—	—	—	87	9	188
Diseases of Prostate	—	—	—	—	—	—	—	—	—	—	32	—	—	—	—	—	69	20	128
Other Diseases of Male Genital Organs	2	—	—	—	—	—	—	—	—	—	52	—	—	—	—	—	46	3	144
Diseases of Female Genital Organs	—	—	—	—	—	—	—	—	—	—	229	—	—	—	—	—	341	4	581
TOTALS	99	6	—	—	—	—	1	—	—	—	457	—	—	—	—	—	706	75	1,391

Disease Group	Disease	Booth Hall Hospital				Crumpsall Hospital				Withington Hospital				Totals
		Children under 16		Men and Women		Children under 16		Men and Women		Children under 16		Men and Women		
		Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	
DISEASES OF PREGNANCY, CHILDBIRTH, AND THE PUERPERAL STATE	Puerperal Pyrexia—	—	—	—	—	—	—	—	—	—	—	—	—	12
	1. Women confined in hospital	—	—	—	—	—	—	7	2	—	—	5	—	13
	2. Women admitted from outside	—	—	—	—	—	—	—	—	—	—	11	—	—
	Puerperal Sepsis—	—	—	—	—	—	—	3	—	—	—	—	1	5
	1. Women confined in hospital	—	—	—	—	—	—	1	—	—	—	4	—	6
	2. Women admitted from outside	—	—	—	—	—	—	4	1	—	—	7	1	13
	Post-abortive Sepsis	—	—	—	—	—	—	254	—	—	—	339	3	596
	Abortion and Threatened Abortion	—	—	—	—	—	—	200	—	—	—	514	—	714
	Ante-natal Observation, etc.	—	—	—	—	—	—	12	10	—	—	18	3	41
	Ectopic Gestation and other Accidents of Pregnancy..	—	—	—	—	—	—	—	—	—	—	—	—	—
DISEASES OF SKIN	Not Confined in Hospital	—	—	—	—	—	—	—	—	—	—	—	—	2
	{ Puerperal Hemorrhage	—	—	—	—	—	—	1	—	—	—	1	—	2
	{ Puerperal Albuminuria and Convulsions and other Toxæmias of Pregnancy	—	—	—	—	—	—	1	—	—	—	1	—	2
	{ Other Accidents of Childbirth	—	—	—	—	—	—	5	—	—	—	1	—	6
	{ Puerperal Insanity	—	—	—	—	—	—	—	—	—	—	—	—	2
	{ Puerperal Diseases of Breast.. .. .	—	—	—	—	—	—	—	—	—	—	—	—	—
	TOTALS	—	—	—	—	—	—	491	13	—	1	902	8	1,415
	Carbuncle, Boil	61	2	—	—	—	—	80	4	—	—	110	2	260
	Cellutis, Acute Abscess	138	3	1	—	1	—	130	6	—	—	255	6	540
	Bedsore	—	—	—	—	—	—	—	—	—	—	—	—	—
NON-TUBERCULOUS DISEASES OF BONES AND ORGANS OF LOCOMOTION	Dermatitis	33	1	—	—	—	—	47	1	—	—	72	—	155
	Eczema	20	2	—	—	—	—	43	—	—	—	33	1	99
	Herpes Zoster	2	—	—	—	—	—	6	—	—	—	5	—	13
	Impetigo	125	4	—	—	2	—	22	—	—	—	16	—	159
	Scabies	28	—	—	—	—	—	27	—	—	—	21	—	77
	Ulcer of leg	—	—	—	—	—	—	75	1	—	—	60	7	144
	Other Diseases of Skin	51	4	—	—	—	—	179	6	—	—	73	2	316
	TOTALS	458	16	1	—	3	—	609	18	5	—	645	18	1,773
	Osteomyelitis and Periostitis	19	—	—	—	—	—	7	1	—	—	14	1	43
	Talipes	1	—	—	—	—	—	—	—	—	—	1	—	4
Deformities due to Poliomyelitis	1	—	—	—	—	—	—	—	—	—	—	—	1	
Other Diseases of Bones, Joints, etc.	24	1	—	—	1	—	76	2	—	—	65	6	175	
TOTALS	45	1	—	—	1	—	83	3	3	—	80	7	223	

CONGENITAL MALFORMATIONS	Hydrocephalus and Spina Bifida and Meningocele	..	1	24	—	—	—	2	4	1	—	2	2	—	—	—	36
	Congenital Pyloric Stenosis ..	..	1	1	—	—	—	—	—	—	—	1	1	—	—	—	3
	Cleft Palate, Hare Lip	..	3	1	—	—	—	1	5	4	—	—	1	—	—	—	6
	Other Congenital Malformations	..	4	3	—	—	—	—	—	—	—	—	—	—	—	—	17
	TOTALS ..	..	9	29	—	—	—	3	9	5	—	5	2	—	—	—	62
DISEASES OF EARLY INFANCY	Atrophy, Debility, Marasmus, etc.	..	54	23	—	—	—	7	1	1	—	—	—	—	—	—	86
	Premature Birth ..	..	1	6	—	—	—	4	33	—	—	31	33	—	—	—	108
	Injury at Birth ..	..	—	—	—	—	—	—	9	—	—	—	—	—	—	—	9
	Other Diseases of Early Infancy	..	9	4	—	—	—	—	4	1	—	—	12	5	—	—	35
	TOTALS ..	..	64	33	—	—	—	11	47	2	—	43	38	—	—	—	238
VIOLENCE	Old Age, Senility, Senile Decay (not senile dementia)	..	—	—	—	—	—	—	—	155	200	—	—	—	118	79	552
	TOTALS ..	..	—	—	—	—	—	—	—	155	200	—	—	—	118	79	552
	Poisoning by Coal Gas or other Gas	..	2	1	—	—	—	—	—	2	—	—	—	—	—	1	6
	Food Poisoning ..	..	—	—	—	—	—	—	1	4	—	—	—	—	2	—	12
VIOLENCE	Other Poisoning ..	..	3	1	—	—	—	—	—	—	—	—	—	—	—	—	—
	Cut Throat ..	..	—	—	—	—	—	—	—	1	—	—	—	—	—	—	2
	Drowning and Suffocation ..	..	1	—	—	—	—	—	—	1	—	—	—	—	—	—	1
	Electrical Injuries and Lightning	..	—	—	—	—	—	—	—	16	2	—	1	28	2	86	
	Burns ..	..	34	1	1	—	—	—	—	14	—	—	—	16	1	118	
	Scalds ..	..	83	3	—	—	—	—	—	225	20	1	—	297	21	673	
	Other Accidents associated with Fracture	..	101	1	6	1	—	—	—	196	4	4	—	239	7	574	
	Other Accidents without Fracture	..	117	—	5	—	—	2	—	19	—	—	—	8	—	42	
	Other Forms of Violence	..	14	1	—	—	—	—	—	—	—	—	—	—	—	—	—
	TOTALS ..	..	355	8	12	2	2	2	1	478	27	6	1	590	32	1,514	
HEALTHY	Ill-defined Diseases	..	263	10	1	—	—	3	1	174	1	—	—	69	1	523	—
	TOTALS ..	..	263	10	1	—	—	3	1	174	1	—	—	69	1	523	—
	Convalescence (<i>i.e.</i> , transferred from other Hospital)	..	38	—	—	—	—	—	—	—	—	—	—	—	—	—	38
	TOTALS ..	..	38	—	—	—	—	—	—	—	—	—	—	—	—	—	38
HEALTHY	Healthy Mothers	..	—	—	69	—	—	—	—	1,817	—	—	—	1,997	—	3,883	—
	Healthy Infants	..	14	—	—	—	—	1,794	—	—	—	2,088	—	—	—	3,996	—
	Healthy (other than Mothers and Infants)	..	5	—	—	—	—	—	—	5	—	22	—	5	—	37	—
	TOTALS ..	..	19	—	69	—	—	1,794	—	1,822	—	2,110	—	2,002	—	7,816	—

SUMMARY OF TABLE IX.
Classification (in Disease Groups) of Discharges and Deaths in the General Hospitals, 1935.

Disease Group	Booth Hall Hospital				Crumpsall Hospital				Withington Hospital				Totals
	Children under 16		Men and Women		Children under 16		Men and Women		Children under 16		Men and Women		
	Dis.	Died	Dis.	Died.	Dis.	Died	Dis.	Died	Dis.	Died	Dis.	Died	
1. Infectious Disease	386	72	6	—	6	—	434	44	3	1	809	261	2,022
2. Cancer and Other Tumours	2	2	—	—	—	—	128	190	—	—	178	266	766
3. Rheumatism, Diseases of Nutrition, etc.	295	6	—	—	1	—	439	14	1	—	602	48	1,406
4. Diseases of Blood and Blood-forming Organs	4	2	—	—	—	—	25	11	—	—	60	7	109
5. Chronic Poisoning	—	—	—	—	—	—	20	1	—	—	15	—	36
6. Diseases of Nervous System and Sense Organs	273	27	1	—	1	—	732	121	1	7	649	218	2,030
7. Diseases of Circulatory System	126	17	—	—	1	—	362	203	2	—	501	304	1,516
8. " Respiratory System	775	94	1	—	3	4	856	242	3	1	1,022	281	3,282
9. " Digestive System	*1,675	49	10	—	22	1	1,034	54	3	—	1,324	81	4,253
10. Non-Venereal Diseases of Genito-urinary System	99	6	1	—	1	—	457	46	—	—	706	75	1,391
11. Diseases of Pregnancy, Childbirth, and the Puerperal State	—	—	—	—	—	—	491	13	—	1	902	8	1,415
12. Diseases of Skin	458	16	1	—	3	—	609	18	5	—	645	18	1,773
13. Non-Tuberculous Diseases of Bones and Organs of Locomotion	45	1	—	—	1	—	83	3	3	—	80	7	223
14. Congenital Malformations	9	29	—	—	3	9	5	—	5	2	—	—	62
15. Diseases of Early Infancy	64	33	—	—	11	47	2	—	43	38	—	—	238
16. Old Age, Senility, and Senile Decay	—	—	—	—	—	—	155	200	—	—	118	79	552
17. Violence	355	8	12	2	2	1	478	27	6	1	590	32	1,514
18. Ill-defined Diseases	263	10	1	—	3	1	174	1	—	—	69	1	523
19. Convalescence	38	—	—	—	—	—	—	—	—	—	—	—	38
20. Healthy	19	—	69	—	1,794	—	1,822	—	2,110	—	2,002	—	7,816
GRAND TOTALS													
4,886 372 102 2 1,852 63 8,306 1,188 2,185 51 10,272 1,686 30,965													
5,258 104 1,915 11,409 2,236 11,958 14,194													

* Includes TONSILS AND ADENOIDS.

TABLE

CLASSIFICATION (ACCORDING TO DISEASES)

IN 1935, ACCORDING TO

Disease Group	Disease		
		0—5	6—
INFECTIOUS DISEASE	Enteric Fever Discharged	..	2
	Died .. ..	..	..
	Smallpox Discharged	..	..
	Died .. ..	..	..
	Measles Discharged	113	11
	Died	28	2
	Scarlet Fever Discharged	6	2
	Died .. ..	..	..
	Whooping Cough Discharged	73	..
	Died	2	..
	Diphtheria Discharged	9	2
	Died	1	1
	Influenza Discharged	4	10
	Died .. ..	..	..
	Influenzal Pneumonia Discharged	..	..
	Died .. ..	..	..
	Dysentery.. .. . Discharged	..	..
	Died .. ..	..	..
	Erysipelas.. .. . Discharged	5	..
	Died .. ..	..	..
	Poliomyelitis Discharged	1	1
	Died .. ..	..	..
	Acute Lethargic Encephalitis Discharged	..	..
	Died .. ..	..	..
	Cerebro-spinal Fever Discharged	10	7
	Died	1	..
	Anthrax Discharged	..	..
	Died .. ..	..	..
	Tetanus Discharged	..	..
	Died .. ..	..	..
	Tuberculosis—		
	Pulmonary, Thoracic, and Respiratory System Discharged	4	5
	Died	4	3
	Bones and Joints Discharged	3	3
	Died .. ..	..	..
	Abdominal Peritonitis Discharged	2	3
	Died	2	..
	Peripheral Glands Discharged	2	1
	Died .. ..	..	..
	Meningitis and Brain Discharged	..	1
	Died	7	2
	Skin (Lupus) Discharged	..	..
	Died .. ..	..	..
	Urino-genital Discharged	..	..
	Died .. ..	..	..
	Toxituberculide Discharged	..	..
	Died .. ..	..	..
	Bazin's Disease Discharged	..	..
	Died .. ..	..	..
	Ulceration of the Skin Discharged	..	..
	Died .. ..	..	..
	Empyema Discharged	..	..
	Died .. ..	..	..
	Fistula Discharged	..	..
	Died .. ..	..	..
	Soft Palate Discharged	..	..
	Died .. ..	..	..
	Other sites and ill-defined Discharged	1	..
	Died .. ..	..	..
	Syphilis—Congenital Discharged	2	..
	Died .. ..	..	..
	Acquired Discharged	..	..
	Died .. ..	..	..
	Gonorrhœa Discharged	2	4
	Died	1	..
	Gonorrhœal Ophthalmia Discharged	..	..
	Died	1	..
	Other Venereal Disease.. .. . Discharged	..	..
	Died .. ..	..	..
	Undulant Fever Discharged	..	..
	Died .. ..	..	..
	Purulent Infection, Septicæmia (but not Puerperal).. .. . Discharged	..	..
	Died .. ..	..	..
	Malaria Discharged	1	..
	Died .. ..	..	..
	Hydatid Cysts.. .. . Discharged	..	..
	Died .. ..	..	..
	Carried forward Discharged	238	52
	Died	47	8

DISCHARGES AND DEATHS IN BOOTH HALL HOSPITAL SELECTED LIFE PERIODS.

AGE GROUPS								Totals	
1—15	16—25	26—40	41—50	51—60	61—70	71—80	Over 80		
								3	
1
..
..
3	1	..	..	..	..	..	..	128	30
..	9	..
1	74	2
..	1	..	..	..	..	..	..	11	2
..	23	..
8	1	..	..	..	..	..	..	..	1
..
1	5	..
..	2	..
..
..
..	23	1
6
..
..
..	19	18
10	11	..	..	..	..	..	..	16	..
10	11	2
6	5	..
2	1	12
..	3	..	..	..	..	..	..	..	..
..
..
..
..
..
..
..	1	..
..	4	..
2
..	6	1
..	1
..
..
..	1
..	1	..	..	..	..	..	..	1	..
..
..
49	16	3	..	..	..	..	..	342	71

TABLE

Disease Group	Disease		
		0—5	6—1
INFECTIOUS DISEASE—continued	Brought forward Discharged	238	52
	Died	47	
	Mycoses Discharged	..	..
	Died .. .. .	..	..
	German Measles Discharged	4	4
	Died .. .. .	..	..
	Chickenpox Discharged	11	4
	Died .. .. .	..	..
	Mumps Discharged	5	3
	Died	1	..
CANCER AND OTHER TUMOURS (Malignant Disease, Carcinoma, Sarcoma, etc.)	Pemphigus Neonatorum Discharged	..	..
	Died .. .. .	..	..
	Other Infectious Diseases Discharged	11	1
	Died .. .. .	..	..
	TOTALS Discharged	269	64
	Died	48	..
	Cancer of—Lip, Mouth, and Pharynx Discharged	..	..
	Died .. .. .	..	..
	Larynx Discharged	..	..
	Died .. .. .	..	..
RHEUMATISM, DISEASES OF NUTRITION AND OF ENDOCRINE GLANDS AND OTHER GENERAL DISEASES	Thorax (bronchi, lungs, mediastinum, pleura, } Discharged	..	..
	pericardium) } Died .. .. .	..	..
	Œsophagus Discharged	..	..
	Died .. .. .	..	..
	Stomach Discharged	..	..
	Died .. .. .	..	..
	Intestines (including anus, appendix, cæcum, } Discharged	..	..
	caput coli, colon, duodenum, ileum, } Died .. .. .	..	..
	jejunum, rectum, sigmoid, etc.) } Discharged	..	..
	Pancreas Discharged	..	..
	Died .. .. .	..	..
	Gall Bladder and Liver Discharged	..	..
	Died .. .. .	..	..
	Peritoneum Discharged	..	..
	Died .. .. .	..	..
	Respiratory Organs Discharged	..	..
	Died .. .. .	..	..
	Uterus Discharged	..	..
	Died .. .. .	..	..
	Other Female Genital Organs Discharged	..	..
	Died .. .. .	..	..
	Breast Discharged	..	..
	Died .. .. .	..	..
	Male Genito-urinary Organs Discharged	..	..
	Died .. .. .	..	..
	Skin Discharged	..	..
	Died .. .. .	..	..
	Other or Unspecified Organs Discharged	1	..
	Died .. .. .	..	..
	Other Tumours Discharged	..	1
	Died .. .. .	..	..
	TOTALS Discharged	1	1
	Died .. .. .	..	..
	Rheumatic Fever and Acute Rheumatism, together with } Discharged	9	48
	Sub-acute Rheumatism } Died .. .. .	..	..
	Chorea Discharged	4	59
	Died .. .. .	..	..
	Non-articular manifestations of so-called “Rheumatism” } Discharged	2	2
	(muscular rheumatism, fibrositis, lumbago, sciatica, } Died .. .. .	..	..
	and rheumatic neuritis) } Discharged	..	1
	Chronic Arthritis Died .. .. .	..	..
	Gout Discharged	..	..
	Died .. .. .	..	..
	Diabetes Mellitus Discharged	..	..
	Died .. .. .	..	..
	Rickets Discharged	23	1
	Died	3	..
	Other Deficiency Diseases Discharged	1	1
	Died	1	..
	Diseases of Thyroid, etc. Discharged	..	1
	Died .. .. .	..	..
	Other General Diseases Discharged	1	3
	Died .. .. .	..	..
	TOTALS Discharged	40	116
	Died	4	..

ruined.

[illegible]

TABLE

Disease Group	Disease		
		0—5	6—
DISEASES OF BLOOD AND BLOOD-FORMING ORGANS	Diseases of Blood, etc. Discharged	2	..
	Died	1	1
	TOTALS Discharged	2	..
	Died	1	1
CHRONIC POISONING	Alcoholism Discharged	..	..
	Died .. ..	..	..
	Other Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	..	..
	Died .. ..	..	..
DISEASES OF NERVOUS SYSTEM AND SENSE ORGANS, OTHER THAN ENCEPHALITIS LETHARGICA	Cerebral Abscess Discharged	..	1
	Died .. ..	..	..
	Encephalitis, including Chronic Encephalitis Lethargica .. Discharged	1	..
	Died	1	..
	Meningitis, other than Tuberculosis Discharged	..	4
	Died .. ..	..	3
	Tabes Dorsalis Discharged	..	..
	Died .. ..	..	..
	Disseminated Sclerosis Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Spinal Cord Discharged	..	..
	Died .. ..	..	..
	Cerebral Hæmorrhage, Embolism, and Thrombosis .. Discharged	..	..
	Died .. ..	..	1
	General Paralysis of the Insane Discharged	..	..
	Died .. ..	..	..
	Senile Dementia Discharged	..	..
	Died .. ..	..	..
	Other forms of Insanity Discharged	1	..
	Died .. ..	..	..
	Epilepsy Discharged	3	1
	Died	1	..
	Infantile Convulsions Discharged	18	..
	Died	6	..
	Hysteria and Hystero-epilepsy Discharged	..	..
	Died .. ..	..	1
	Neurasthenia Discharged	..	..
	Died .. ..	..	..
	Mental Deficiency (including idiocy, imbecility, and Mongolism) .. Discharged	5	..
	Died	2	..
	Other Disease of Nervous System (other than chorea, sclatica, and rheumatic neuritis) .. Discharged	5	..
	Died .. ..	..	..
	Diseases of Eye Discharged	19	9
	Died	2	..
	Diseases of Ear and Mastoid Sinus Discharged	96	56
	Died	7	1
	TOTALS Discharged	148	73
	Died	19	5
DISEASES OF CIRCULATORY SYSTEM	Pericarditis Discharged	..	1
	Died .. ..	..	..
	Endocarditis Discharged	1	8
	Died .. ..	..	..
	Valvular Disease of Heart Discharged	..	4
	Died .. ..	..	..
	Diseases of Myocardium Discharged	..	..
	Died .. ..	..	..
	Diseases of Coronary Arteries; Angina Pectoris .. Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Heart Discharged	2	8
	Died	4	..
	Aneurysm Discharged	..	..
	Died .. ..	..	..
	Arterio-sclerosis and Other Diseases of Arteries .. Discharged	..	..
	Died .. ..	..	..
	Varicose Veins, including hæmorrhoids Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Veins Discharged	1	..
	Died .. ..	..	..
	Diseases of Lymphatic System Discharged	35	28
	Died	4	..
	Abnormalities of Blood Pressure Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Circulatory System Discharged	4	..
	Died .. ..	..	..
	TOTALS Discharged	43	5
	Died	8	..

TABLE

Disease Group	Disease		
		0—5	6—1
DISEASES OF RESPIRATORY SYSTEM	Diseases of Nose and Larynx Discharged	24	4
	Died	1	
	Bronchitis Discharged	172	44
	Died	17	
	Bronchiectasis Discharged	8	6
	Died		
	Broncho-pneumonia Discharged	118	17
	Died	43	
	Lobar Pneumonia Discharged	117	93
	Died	14	
	Other Pneumonia Discharged	3	1
	Died	1	
	Empyema Discharged	7	4
	Died	4	
DISEASES OF DIGESTIVE SYSTEM	Pleurisy Discharged	..	2
	Died	1	
	Pulmonary Embolism Discharged	..	..
	Died .. ..	..
	Asthma Discharged	2	1
	Died .. ..	..
	Other Diseases of Respiratory System Discharged	29	20
	Died	6	
	TOTALS Discharged	480	192
	Died	87	
DISEASES OF DIGESTIVE SYSTEM	Diseases of Teeth and Gums Discharged	12	25
	Died	1	
	Vincent's Angina Discharged	4	1
	Died .. ..	..
	Other Diseases of Tonsils (tonsillitis, etc.) Discharged	500	616
	Died	6	
	Other Diseases of Mouth, Pharynx, and Œsophagus Discharged	5	4
	Died .. ..	..
	Ulcer of Stomach and Duodenum Discharged	2	..
	Died .. ..	..
	Other Diseases of Stomach (excluding tumours) Discharged	13	1
	Died	5	
	Diarrhœa and Enteritis Discharged	83	2
	Died	22	
	Appendicitis Discharged	7	34
	Died	3	
	Hernia Discharged	13	..
	Died	2	
	Intestinal Obstruction Discharged	5	1
	Died	2	
NON-VENEREAL DISEASES OF GENITO-URINARY SYSTEM	Constipation and Other Diseases of Intestine Discharged	36	9
	Died .. ..	..
	Cirrhosis and Other Diseases of Liver, Diseases of Gall } Discharged	5	1
	Bladder and of Pancreas } Died .. ..	..
	Peritonitis (non-tuberculous and without stated cause) .. Discharged	..	..
	Died	1	
	Fistula-in-ano Discharged	..	..
	Died .. ..	..
	Ischio-rectal Abscess Discharged	..	..
	Died .. ..	..
	TOTALS Discharged	685	694
	Died	42	
NON-VENEREAL DISEASES OF GENITO-URINARY SYSTEM	Acute Nephritis Discharged	7	9
	Died	1	
	Chronic Nephritis Discharged	..	..
	Died .. ..	..
	Pyelitis (including peri-nephritic abscess).. .. . Discharged	4	4
	Died .. ..	..
	Other Diseases of Kidney Discharged	5	4
	Died .. ..	..
	Diseases of Bladder and Urethra Discharged	1	..
	Died .. ..	..
	Diseases of Prostate Discharged	..	..
	Died .. ..	..
	Other Diseases of Male Genital Organs Discharged	26	6
	Died	2	
NON-VENEREAL DISEASES OF GENITO-URINARY SYSTEM	Diseases of Female Genital Organs Discharged	2	1
	Died	
	TOTALS Discharged	45	24
	Died	3	

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AGE GROUPS								
-15	16—25	26—40	41—50	51—60	61—70	71—80	Over 80	Totals
	1	34
..	1
..	234
..	17
..	19
..	138
1	46
2	266
..	18
..	6
..	1
..	14
..	4
..	4
..	1
..
..	3
..
..	58
..	6
3	1	..	..	..	..	776
	94
..	1	..	..	..	..	..	..	51
..	1
..	6
..	6	..	..	..	..	..	..	1346
1	7
..	9
..	2
..
..	14
..	5
..	85
..	2	..	..	..	..	..	..	22
..	89
..	5
..	1	..	..	..	..	..	..	15
1	2
..	8
..	3
..	53
..
..	7
..	1
1
..	3
..
..
3	10	..	..	..	..	..	..	1685
	49
1	25
..	4
..	1
..	..	1	..	..	..	..	..	10
..
..	15
..
..	3
..
..
..
..	39
..	2
..	7
..
1	..	1	..	..	..	..	..	100
	6

Disease Group	Disease	0—5		6—
DISEASES OF PREGNANCY, CHILDBIRTH, AND THE PUERPERAL STATE	Puerperal Pyrexia—			
	1. Women confined in hospital Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	2. Women admitted from outside Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	Puerperal Sepsis—			
	1. Women confined in hospital Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	2. Women admitted from outside Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	Post-abortive Sepsis Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	Abortion and Threatened Abortion Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	Ante-natal Observation, etc. Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	Ectopic Gestation and other Accidents of Pregnancy Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	Not Confined in Hospital	Puerperal Hæmorrhage Discharged .. .. .	..	..
		Died .. .. .	..	..
		Puerperal Albuminuria and Convulsions and other Toxæmias of Pregnancy Discharged .. .. .	..	..
		Died .. .. .	..	..
		Other Accidents of Childbirth Discharged .. .. .	..	..
		Died .. .. .	..	..
	Puerperal Insanity Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	Puerperal Diseases of Breast Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	TOTALS Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
DISEASES OF SKIN	Carbuncle, Boil Discharged 22		17	1
	Died	1	35	..
	Cellulitis, Acute Abscess Discharged	3	..	..
	Died .. .. .	..	..	..
	Bedsore Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	Dermatitis Discharged 14		9	..
	Died	1	..	..
	Eczema Discharged 16		3	..
	Died	2	..	..
	Herpes Zoster Discharged .. .. .	..	2	..
	Died .. .. .	..	..	..
	Impetigo Discharged 75		30	..
	Died	4	13	..
	Scabies Discharged 9		..	..
	Died .. .. .	..	..	..
	Ulcer of Leg Discharged .. .. .	..	..	..
	Died .. .. .	..	..	..
	Other Diseases of Skin Discharged 25		14	2
	Died	2	..	..
	TOTALS Discharged 232		123	3
	Died	13	..	..
NON-TUBEROULOUS DISEASES OF BONES AND ORGANS OF LOCOMOTION	Osteomyelitis and Periostitis Discharged 3		2	..
	Died .. .. .	..	..	..
	Talipes Discharged 1		..	..
	Died .. .. .	..	..	..
	Deformities due to Poliomyelitis Discharged 1		..	..
	Died .. .. .	..	..	..
	Other Diseases of Bones, Joints, etc. Discharged 4		10	..
	Died .. .. .	..	..	..
	TOTALS Discharged 9		17	..
	Died .. .. .	..	..	..
CONGENITAL MALFORMATIONS	Hydrocephalus and Spina Bifida and Meningocele Discharged	24	..	..
	Died	1	..	..
	Congenital Pyloric Stenosis Discharged	1	..	..
	Died	3	..	..
	Cleft Palate, Hare Lip Discharged	1	..	..
	Died	4	..	..
	Other Congenital Malformations Discharged	3	..	..
	Died .. .. .	..	..	..
	TOTALS Discharged 8		29	..
	Died	29	..	..

CLASSIFICATION (IN DISEASE GROUPS)
IN 1935 ACCORDING TO
SUMMARY

Disease Group															0—5		6—10
1.	Infectious Disease	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	269		64
														Died		48	
2.	Cancer and Other Tumours	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	1		1
														Died		..	
3.	Rheumatism, Diseases of Nutrition, etc.	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	40		116
														Died		4	
4.	Diseases of Blood and Blood-forming Organs	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	2		..
														Died		1	
5.	Chronic Poisoning	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	..		..
														Died		..	
6.	Diseases of Nervous System and Sense Organs	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	148		73
														Died		19	
7.	Diseases of Circulatory System	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	43		51
														Died		8	
8.	„ Respiratory System	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	480		192
														Died		87	
9.	„ Digestive System	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	685		694
														Died		42	
10.	Non-Venereal Diseases of Genito-urinary System	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	45		24
														Died		3	
11.	Diseases of Pregnancy, Childbirth, and the Puerperal State	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	..		..
														Died		..	
12.	Diseases of Skin	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	232		123
														Died		13	
13.	Non-Tuberculous Diseases of Bones and Organs of Locomotion	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	9		17
														Died		..	
14.	Congenital Malformations	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	8		1
														Died		29	
15.	Diseases of Early Infancy	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	51		4
														Died		32	
16.	Old Age, Senility, and Senile Decay	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	..		..
														Died		..	
17.	Violence	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	151		119
														Died		7	
18.	Ill-defined Diseases	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	92		106
														Died		9	
19.	Convalescence	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	11		18
														Died		..	
20.	Healthy	..	..	..	..	..	..	..	..	..	..	..	..	Discharged	21		..
														Died		..	
TOTALS														Discharged	2288		1603
														Died		302	

DISCHARGES AND DEATHS IN BOOTH HALL HOSPITAL
SELECTED LIFE PERIODS.

TABLE X.

AGE GROUPS																	
11—15		16—25		26—40		41—50		51—60		61—70		71—80		Over 80		Totals	
53	16	6	..	..	..	..	..	..	..	..	..	..	..	..	..	392	72
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2
39	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	295	6
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2
..
52	3	..	..	..	..	..	..	..	1	..	..	..	..	..	..	274	27
32	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	126	17
03	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	776	94
96	3	10	..	..	..	..	..	..	..	..	..	..	..	..	..	1685	49
30	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	100	6
..
03	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	459	16
19	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	45	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	29
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	64	33
..
85	1	3	3	1	4	1	..	1	..	1	1	..	..	..	..	367	10
65	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	264	10
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	38	..
..	..	22	43	2	..	..	..	..	..	..	..	..	..	..	..	88	..
97	41	43	47	7	1	1	1	1	1	1	1	..	..	..	..	4988	374

TABLE

CLASSIFICATION (ACCORDING TO DISEASES) OF
IN 1935, ACCORDING TO

Disease Group	Disease		
		0—5	6—10
INFECTIOUS DISEASE	Enteric Fever Discharged	..	..
	Died .. ..	..	..
	Smallpox Discharged	..	..
	Died .. ..	..	..
	Measles Discharged	..	..
	Died .. ..	..	..
	Scarlet Fever Discharged	..	..
	Died .. ..	..	..
	Whooping Cough Discharged	..	..
	Died .. ..	..	..
	Diphtheria Discharged	..	..
	Died .. ..	..	..
	Influenza Discharged	..	..
	Died .. ..	..	..
	Influenzal Pneumonia Discharged	..	..
	Died .. ..	..	..
	Dysentery.. .. . Discharged	..	..
	Died .. ..	..	..
	Erysipelas.. .. . Discharged	..	..
	Died .. ..	..	..
	Poliomyelitis Discharged	..	..
	Died .. ..	..	..
	Acute Lethargic Encephalitis Discharged	..	..
	Died .. ..	..	..
	Cerebro-spinal Fever Discharged	..	..
	Died .. ..	..	..
	Anthrax Discharged	..	..
	Died .. ..	..	..
	Tetanus Discharged	..	..
	Died .. ..	..	..
	Tuberculosis—		
	Pulmonary, Thoracic, and Respiratory System Discharged	..	..
	Died .. ..	..	..
	Bones and Joints Discharged	..	..
	Died .. ..	..	..
	Abdominal Peritonitis Discharged	..	..
	Died .. ..	..	..
	Peripheral Glands Discharged	..	..
	Died .. ..	..	..
	Meningitis and Brain Discharged	..	..
	Died .. ..	..	..
	Skin (Lupus) Discharged	..	..
	Died .. ..	..	..
	Urino-genital Discharged	..	..
	Died .. ..	..	..
	Toxituberculide Discharged	..	..
	Died .. ..	..	..
	Bazin's Disease Discharged	..	..
	Died .. ..	..	..
	Ulceration of the Skin Discharged	..	..
	Died .. ..	..	..
	Empyema Discharged	..	..
	Died .. ..	..	..
	Fistula Discharged	..	..
	Died .. ..	..	..
	Soft Palate Discharged	..	..
	Died .. ..	..	..
	Other sites and ill-defined Discharged	..	..
	Died .. ..	..	..
	Syphilis—Congenital Discharged	3	..
	Died .. ..	..	..
	Acquired Discharged	2	..
	Died .. ..	..	..
	Gonorrhœa Discharged	..	..
	Died .. ..	..	..
	Gonorrhœal Ophthalmia Discharged	..	..
	Died .. ..	..	..
	Other Venereal Disease.. .. . Discharged	..	..
	Died .. ..	..	..
	Undulant Fever Discharged	..	..
	Died .. ..	..	..
	Purulent Infection, Septicæmia (but not Puerperal).. .. . Discharged	..	..
	Died .. ..	..	..
	Malaria Discharged	..	..
	Died .. ..	..	..
	Hydatid Cysts.. .. . Discharged	..	..
	Died .. ..	..	..
	Carried forward Discharged	5	..
	Died .. ..	..	..

DISCHARGES AND DEATHS IN CRUMPSALL HOSPITAL SELECTED LIFE PERIODS.

AGE GROUPS									
1—15	16—25	26—40	41—50	51—60	61—70	71—80	Over 80	Totals	
..
..
..
..	1	1	..	..	..	..	..	2	..
..
..	2	..	..	..	..	..	..	2	..
..	18	26	16	9	15	1	..	85	..
..	..	1	1	4	2	..	..	8	..
..	..	1	2	1	1	..	..	..	5
..
..	2	2	2	1	..	..	..	7	..
..	1	..	..	..	..	..	..	1	..
..
..	1	2	..	..	..	..	..	3	..
..	..	1	..	..	..	..	..	..	1
..
..
..	..	1	..	1	..	..	..	..	2
..	12	24	20	17	8	..	..	81	..
..	5	6	4	3	2	..	..	..	20
..	7	3	..	..	1	..	..	11	..
..	1	..	1	1	1	..	..	3	4
..	2	1	..	..	..	..	..	..	1
..	1	1	..	..	..	..	..	1	..
..
..	1	..	1	..	..	..	..	..	2
..
..
..
..
..
..
..
..
..	2	3	1	1	..	..	..	7	..
..	1	2	..	..	..	..	..	6	1
..	30	35	15	10	1	..	..	93	..
..	62	45	8	2	3	..	..	120	4
..	..	1	..	..	..	..	..	..	1
..	..	..	1	2	1	1	..	5	..
..
..
..	..	..	..	..	..	3	..	..	3
..	..	1	..	..	..	..	..	1	..
..
..	141	147	64	46	31	2	..	436	44
..	9	12	8	7	8	..	..	..	..

TABLE

Disease Group	Disease		
		0—5	6—
INFECTIOUS DISEASE—continued	Brought forward Discharged	5	..
	.. .. . Died .. ..	..	..
	Mycooses Discharged	..	..
	.. .. . Died .. ..	..	..
	German Measles Discharged	..	..
	.. .. . Died .. ..	..	..
	Chickenpox Discharged	..	..
	.. .. . Died .. ..	..	..
	Mumps Discharged	..	..
	.. .. . Died .. ..	..	..
CANCER AND OTHER TUMOURS (Malignant Disease, Carcinoma, Sarcoma, etc.)	Pemphigus Neonatorum Discharged	1	..
	.. .. . Died .. ..	..	..
	Other Infectious Diseases Discharged	..	..
	.. .. . Died .. ..	..	..
	TOTALS Discharged	6	..
	.. .. . Died .. ..	..	..
	Cancer of—Lip, Mouth, and Pharynx Discharged	..	..
	.. .. . Died .. ..	..	..
	Larynx Discharged	..	..
	.. .. . Died .. ..	..	..
	Thorax (bronchi, lungs, mediastinum, pleura, } Discharged	..	..
RHEUMATISM, DISEASES OF NUTRITION AND OF ENDOCRINE GLANDS AND OTHER GENERAL DISEASES	pericardium) } Died .. ..	..	..
	Esophagus Discharged	..	..
	.. .. . Died .. ..	..	..
	Stomach Discharged	..	..
	.. .. . Died .. ..	..	..
	Intestines (including anus, appendix, cæcum, } Discharged	..	..
	caput coli, colon, duodenum, ileum, } Died .. ..	..	..
	jejunum, rectum, sigmoid, etc.) .. .. } .. ..	..	..
	Pancreas Discharged	..	..
	.. .. . Died .. ..	..	..
	Gall Bladder and Liver Discharged	..	..
	.. .. . Died .. ..	..	..
	Peritoncum Discharged	..	..
	.. .. . Died .. ..	..	..
	Respiratory Organs Discharged	..	..
	.. .. . Died .. ..	..	..
	Uterus Discharged	..	..
	.. .. . Died .. ..	..	..
	Other Female Genital Organs Discharged	..	..
	.. .. . Died .. ..	..	..
	Breast Discharged	..	..
	.. .. . Died .. ..	..	..
	Male Genito-urinary Organs Discharged	..	..
	.. .. . Died .. ..	..	..
	Skin Discharged	..	..
	.. .. . Died .. ..	..	..
	Other or Unspecified Organs Discharged	..	..
	.. .. . Died .. ..	..	..
	Other Tumours Discharged	..	..
	.. .. . Died .. ..	..	..
	TOTALS Discharged	..	..
	.. .. . Died .. ..	..	..
	Rheumatic Fever and Acute Rheumatism, together with } Discharged	..	..
	Sub-acute Rheumatism } Died .. ..	..	..
	Chorea Discharged	..	..
	.. .. . Died .. ..	..	..
	Non-articular manifestations of so-called “Rheumatism” } Discharged	..	..
	(muscular rheumatism, fibrositis, lumbago, sciatica, } .. ..	..	..
	and rheumatic neuritis) } Died .. ..	..	..
	Chronic Arthritis Discharged	..	..
	.. .. . Died .. ..	..	..
	Gout Discharged	..	..
	.. .. . Died .. ..	..	..
	Diabetes Mellitus Discharged	..	..
	.. .. . Died .. ..	..	..
	Rickets Discharged	..	..
	.. .. . Died .. ..	..	..
	Other Deficiency Diseases Discharged	..	..
	.. .. . Died .. ..	..	..
	Diseases of Thyroid, etc. Discharged	..	..
	.. .. . Died .. ..	..	..
	Other General Diseases Discharged	..	..
	.. .. . Died .. ..	..	..
	TOTALS Discharged	..	..
	.. .. . Died .. ..	..	..

nnued.

AGE GROUPS									
-15	16—25	26—40	41—50	51—60	61—70	71—80	Over 80	Totals	
	141	147	64	46	31	2	..	436	
..	9	12	8	7	8	..	..	44	
..	
..	1	..	..	..	..	..	..	1	..
..
..
..
..	..	..	..	..	..	..	..	1	..
..	1	1	..	..	..	..	..	2	..
..
..	143	148	64	46	31	2	..	440	
..	9	12	8	7	8	..	..	44	
..	..	..	..	..	9	4	..	13	
..	..	1	1	3	7	5	..	17	
..	..	..	..	1	6	2	..	2	7
..	..	..	2	3	1	..	..	6	21
..	..	1	4	4	7	5	..	2	10
..	..	..	1	5	2	1	1	9	35
..	..	3	4	5	18	4	..	27	32
..	..	2	4	7	10	4	..	3	4
..	..	4	3	5	11	8	1	2	16
..	..	..	1	1	4	..	..	1	2
..	..	..	..	2	9	3	1	2	6
..	..	..	1	..	..	..	..	1	..
..	..	..	1	..	..	..	..	2	2
..	..	..	1	1	..	..	..	13	14
..	..	2	2	3	4	5	2	10	9
..	..	..	4	2	2	..	1	11	6
..	..	1	2	3	5	4	1	3	3
..	..	..	4	1	1	2	1	..	..
..	..	..	..	..	..	1	..	6	13
..	..	..	..	2	6	1	1	18	1
..	..	5	5	4	1	3	..	..	..
..	..	..	..	..	1	..	..	128	190
..	..	10	25	33	40	20	..	90	..
..	..	11	19	41	83	32	4	6	..
..	24	34	16	8	6	2	..	130	1
..	1	2	..	2	1	..	..	59	1
..	8	31	22	39	27	3	..	1	1
..	3	12	5	13	15	11	1	74	7
..	..	..	..	..	1	..	..	1	..
..	3	11	5	32	19	4	2	16	3
..	1	..	..	1	4	..	..	19	1
..	3	4	4	1	3	1	..	44	..
..	5	6	2	6	..	1	..	..	..
..	8	11	5	5	11	4	..	..	..
..
..	56	111	59	106	83	24	..	440	14
..	..	1	1	2	6	4	..	..	..

TABLE 2

Disease Group	Disease		
		0—5	6—1
DISEASES OF BLOOD AND BLOOD-FORMING ORGANS	Diseases of Blood, etc. Discharged .. ..	..	..
	Died .. ..	..	..
	TOTALS Discharged .. ..	..	..
	Died .. ..	..	..
CHRONIC POISONING	Alcoholism Discharged .. ..	..	..
	Died .. ..	..	..
	Other Discharged .. ..	..	..
	Died .. ..	..	..
	TOTALS Discharged .. ..	..	..
	Died .. ..	..	..
DISEASES OF NERVOUS SYSTEM AND SENSE ORGANS, OTHER THAN ENCEPHALITIS LETHARGICA	Cerebral Abscess Discharged .. ..	..	..
	Died .. ..	..	..
	Encephalitis, including Chronic Encephalitis Lethargica	Discharged .. ..	..
	Died .. ..	..	..
	Meningitis, other than Tuberculosis Discharged .. ..	..	..
	Died .. ..	..	..
	Tabes Dorsalis Discharged .. ..	..	..
	Died .. ..	..	..
	Disseminated Sclerosis Discharged .. ..	..	..
	Died .. ..	..	..
	Other Diseases of Spinal Cord Discharged .. ..	..	..
	Died .. ..	..	..
	Cerebral Hæmorrhage, Embolism, and Thrombosis	Discharged .. ..	..
	Died .. ..	..	..
	General Paralysis of the Insane Discharged .. ..	..	..
	Died .. ..	..	..
	Senile Dementia Discharged .. ..	..	..
	Died .. ..	..	..
	Other forms of Insanity Discharged .. ..	..	..
	Died .. ..	..	..
	Epilepsy Discharged .. ..	..	..
	Died .. ..	..	..
	Infantile Convulsions Discharged .. ..	..	..
	Died .. ..	..	..
	Hysteria and Hystero-epilepsy Discharged .. ..	..	..
	Died .. ..	..	..
	Neurasthenia Discharged .. ..	..	..
	Died .. ..	..	..
	Mental Deficiency (including idiocy, imbecility, and Mongolism)	Discharged .. ..	..
	Died .. ..	..	..
	Other Disease of Nervous System (other than chorea, sciatica, and rheumatic neuritis)	Discharged .. ..	..
	Died .. ..	..	..
	Diseases of Eye Discharged .. ..	..	..
	Died .. ..	..	..
	Diseases of Ear and Mastoid Sinus Discharged .. ..	..	..
	Died .. ..	..	..
	TOTALS Discharged .. ..	..	..
	Died .. ..	..	..
DISEASES OF CIRCULATORY SYSTEM	Pericarditis Discharged .. ..	..	..
	Died .. ..	..	..
	Endocarditis Discharged .. ..	..	..
	Died .. ..	..	..
	Valvular Disease of Heart Discharged .. ..	..	..
	Died .. ..	..	..
	Diseases of Myocardium Discharged .. ..	..	..
	Died .. ..	..	..
	Diseases of Coronary Arteries, Angina Pectoris	Discharged .. ..	..
	Died .. ..	..	..
	Other Diseases of Heart Discharged .. ..	..	..
	Died .. ..	..	..
	Aneurysm Discharged .. ..	..	..
	Died .. ..	..	..
	Arterio-sclerosis and Other Diseases of Arteries	Discharged .. ..	..
	Died .. ..	..	..
	Varicose Veins, including hæmorrhoids Discharged .. ..	..	..
	Died .. ..	..	..
	Other Diseases of Veins Discharged .. ..	..	..
	Died .. ..	..	..
	Diseases of Lymphatic System Discharged .. ..	..	..
	Died .. ..	..	..
	Abnormalities of Blood Pressure Discharged .. ..	..	..
	Died .. ..	..	..
	Other Diseases of Circulatory System Discharged .. ..	..	..
	Died .. ..	..	..
	TOTALS Discharged .. ..	..	..
	Died .. ..	..	..

ued.

AGE GROUPS

15	16—25	26—40	41—50	51—60	61—70	71—80	Over 80	Totals
..	2 2	13 2	6 3	4 1	.. 3	.. ..	.. ..	25 11
..	2 2	13 2	6 3	4 1	.. 3	.. ..	.. ..	25 11
..	.. ..	3 1	2 ..	3 ..	8 ..	2 ..	.. ..	18 1
..	.. ..	.. ..	.. ..	2 ..	.. ..	.. ..	.. ..	2 ..
..	.. ..	3 1	2 ..	5 ..	8 ..	2 ..	.. ..	20 1
..	.. ..	1 ..	.. ..	.. 1	.. ..	.. ..	.. ..	1 1
..	12 ..	10 1	1 ..	2 1	.. ..	.. ..	.. ..	25 2
..	.. 3	.. 1	.. 2	.. ..	.. ..	.. ..	.. ..	.. 6
..	.. ..	3 ..	5 1	3 1	.. ..	.. ..	.. ..	11 2
..	1 ..	3 ..	.. ..	1 1	.. ..	.. ..	.. ..	5 1
..	2 ..	1 1	2 ..	3 1	1 2	.. ..	.. ..	9 4
..	5 ..	6 5	10 8	17 29	14 36	2 14	.. 3	54 95
..	.. ..	.. ..	4 2	1 1	.. ..	.. ..	.. ..	5 3
..	.. ..	1 ..	.. ..	2 ..	11 ..	21 1	8 ..	43 1
..	17 ..	35 ..	19 ..	30 ..	13 ..	6 ..	1 ..	120 ..
..	15 ..	19 ..	17 ..	16 ..	3 ..	3 ..	.. ..	73 ..
..	.. 1	.. 1	.. ..	.. ..	.. 1	.. ..	.. ..	.. 3
..	9 ..	5 ..	.. ..	3 ..	.. ..	.. ..	.. ..	17 ..
..	28 ..	96 ..	55 ..	33 ..	19 ..	4 ..	.. ..	235 ..
..	4 ..	2 ..	2 ..	.. ..	.. ..	.. ..	.. ..	8 ..
..	14 ..	9 ..	15 ..	19 ..	17 ..	3 ..	.. ..	77 ..
..	3 ..	2 ..	2 ..	5 ..	4 ..	4 ..	1 ..	21 ..
..	6 ..	13 ..	2 ..	5 ..	2 ..	.. ..	.. ..	29 ..
..	116 5	206 10	133 13	140 37	84 39	43 15	10 3	733 121
..	1 ..	.. 1	.. ..	.. ..	.. 1	.. ..	.. ..	1 2
..	5 2	1 7	1 1	1 2	.. ..	.. ..	.. ..	8 12
..	7 ..	7 2	4 2	2 4	3 5	3 1	1 ..	28 14
..	6 ..	9 5	13 8	22 24	36 50	13 21	.. 10	99 118
..	.. ..	.. 1	.. ..	3 1	2 3	.. 1	.. 1	5 7
..	5 ..	22 4	17 8	9 6	9 9	3 6	.. ..	65 33
..	.. ..	.. ..	.. ..	3 ..	2 1	.. ..	.. ..	5 1
..	.. 1	3 1	1 2	1 1	2 4	2 1	.. 1	9 11
..	3 ..	23 ..	18 ..	11 ..	9 ..	.. ..	.. ..	64 ..
..	2 ..	6 ..	2 ..	2 ..	.. ..	.. ..	.. ..	12 ..
..	6 ..	4 ..	6 ..	.. ..	1 ..	.. ..	.. ..	17 ..
..	3 ..	.. ..	4 1	11 ..	14 ..	.. ..	.. ..	32 t
..	.. ..	6 ..	3 1	2 1	6 1	.. ..	1 ..	18 13
..	38 3	81 20	69 25	67 41	84 72	21 31	2 11	363 203

TABLE I

Disease Group	Disease		
		0—5	6—
DISEASES OF RESPIRATORY SYSTEM	Diseases of Nose and Larynx Discharged	..	..
	Died .. ..	..	..
	Bronchitis Discharged	1	..
	Died .. ..	..	..
	Bronchiectasis Discharged	..	..
	Died .. ..	..	..
	Broncho-pneumonia Discharged	..	2
	Died	1	..
	Lobar Pneumonia Discharged	..	1
	Died .. ..	..	..
	Other Pneumonia Discharged	..	..
	Died .. ..	..	..
	Empyema Discharged	..	..
	Died .. ..	..	..
	Pleurisy Discharged	..	..
DISEASES OF DIGESTIVE SYSTEM	Died .. ..	..	..
	Pulmonary Embolism Discharged	..	..
	Died	1	..
	Asthma Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Respiratory System Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	2	..
	Died	4	..
	Diseases of Teeth and Gums Discharged	..	..
	Died .. ..	..	..
	Vincent's Angina Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Tonsils (tonsillitis, etc.) Discharged	1	1
	Died .. ..	..	..
	Other Diseases of Mouth, Pharynx, and Esophagus Discharged	..	..
	Died .. ..	..	..
	Ulcer of Stomach and Duodenum Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Stomach (excluding tumours) Discharged	1	..
	Died .. ..	..	..
	Diarrhea and Enteritis Discharged	18	..
	Died	1	..
	Appendicitis Discharged	..	1
	Died .. ..	..	..
	Hernia Discharged	..	..
	Died .. ..	..	..
	Intestinal Obstruction Discharged	..	..
	Died .. ..	..	..
	Constipation and Other Diseases of Intestine Discharged	..	..
	Died .. ..	..	..
	Cirrhosis and Other Diseases of Liver, Diseases of Gall } Discharged	..	..
	Bladder and of Pancreas } Died .. ..	..	..
	Peritonitis (non-tuberculous and without stated cause) Discharged	..	..
	Died .. ..	..	..
	Fistula-in-ano Discharged	..	..
	Died .. ..	..	..
	Ischio-rectal Abscess Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	20	2
	Died	1	..
NON-VENEREAL DISEASES OF GENITO-URINARY SYSTEM	Acute Nephritis Discharged	..	..
	Died .. ..	..	..
	Chronic Nephritis Discharged	..	..
	Died .. ..	..	..
	Pyelitis (including peri-nephritic abscess).. .. . Discharged	1	..
	Died .. ..	..	..
	Other Diseases of Kidney Discharged	..	..
	Died .. ..	..	..
	Diseases of Bladder and Urethra Discharged	..	..
	Died .. ..	..	..
	Diseases of Prostate Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Male Genital Organs Discharged	..	..
	Died .. ..	..	..
	Diseases of Female Genital Organs Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	1	..
	Died .. ..	..	..

ed.

AGE GROUPS										
5	16—25	26—40	41—50	51—60	61—70	71—80	Over 80	Totals		
	15	9	2	7	2	...	..	35		
..	16	64	83	122	158	48	8	500	..	
..	3	2	..	..	3	..	..	8	75	
..	5	8	6	4	6	2	1	32	..	
..	48	60	27	18	5	1	..	161	50	
..	4	5	5	4	2	..	1	21	97	
..	..	6	..	2	..	..	..	8	15	
..	4	10	1	4	2	2	..	23	3	
..	..	..	..	..	1	..	..	1	..	
..	1	12	6	4	2	..	..	25	1	
..	10	8	9	7	9	2	..	45	..	
..	..	..	1	3	1	..	..		5	
..	106	184	139	172	190	55	10	859		
..	10	25	41	60	67	32	7	246		
..	21	39	8	4	4	2	..	78		
..	2	..	..	..	..	..	..	2	..	
..	75	49	8	5	1	1	..	141	..	
..	3	5	2	2	1	1	..	14	2	
..	13	45	37	19	12	2	..	123	1	
..	12	34	27	24	29	11	..	138	6	
..	7	3	1	2	1	..	..	32	6	
..	85	63	15	7	4	..	..	175	1	
..	19	44	29	32	22	11	..	157	4	
..	2	2	3	3	1	3	..	14	8	
..	21	25	14	20	14	8	..	102	12	
..	1	15	11	18	11	2	..	58	3	
..	2	2	..	..	..	..	..	4	6	
..	..	..	..	2	1	..	..	3	6	
..	3	3	3	..	..	1	..	10	..	
..	
..	266	329	158	138	101	42	..	1056		
..	5	7	6	16	13	7	..	55		
..	2	6	3	1	..	..	..	12		
..	2	2	..	3	..	..	..	7	2	
..	8	4	2	3	2	..	..	20	6	
..	8	14	7	4	2	..	..	35	..	
..	5	23	9	17	11	2	4	71	11	
..	..	3	3	1	20	5	..	32	18	
..	15	9	10	11	7	..	..	52	7	
..	50	107	49	16	5	2	..	229	2	
..	
..	90	168	83	56	47	9	4	458		
..	1	3	6	11	17	8	..	46		

Disease Group	Disease	0—5	
			6
DISEASES OF PREGNANCY, CHILDBIRTH, AND THE PUERPERAL STATE	Puerperal Pyrexia—		
	1. Women confined in hospital Discharged	..	
	Died .. ..	..	..
	2. Women admitted from outside Discharged	..	
	Died .. ..	..	..
	Puerperal Sepsis—		
	1. Women confined in hospital Discharged	..	
	Died .. ..	..	..
	2. Women admitted from outside Discharged	..	
	Died .. ..	..	..
	Post-abortive Sepsis Discharged	..	
	Died .. ..	..	..
	Abortion and Threatened Abortion Discharged	..	
	Died .. ..	..	..
	Ante-natal Observation, etc. Discharged	..	
	Died .. ..	..	..
	Ectopic Gestation and other Accidents of Pregnancy Discharged	..	
	Died .. ..	..	..
	Not Confined in Hospital	Puerperal Hæmorrhage Discharged	
		Died	
		Puerperal Albuminuria and Convulsions and } Discharged	
		other Toxæmias of Pregnancy } Died	
		Other Accidents of Childbirth Discharged	
		Died	
	Puerperal Insanity Discharged	..	
		Died	
	Puerperal Diseases of Breast Discharged	..	
		Died	
	TOTALS Discharged	..	
	Died .. ..	..
DISEASES OF SKIN	Carbuncle, Boil Discharged	1	
	Died .. ..	..	..
	Cellulitis, Acute Abscess Discharged	..	
	Died .. ..	..	..
	Bedsores Discharged	..	
	Died .. ..	..	..
	Dermatitis Discharged	..	
	Died .. ..	..	..
	Eczema Discharged	..	
	Died .. ..	..	..
	Herpes Zoster Discharged	..	
	Died .. ..	..	..
	Impetigo Discharged	2	
	Died .. ..	..	..
	Scabies Discharged	..	
	Died .. ..	..	..
	Ulcer of Leg Discharged	..	
	Died .. ..	..	..
	Other Diseases of Skin Discharged	..	
	Died .. ..	..	..
	TOTALS Discharged	3	
	Died .. ..	..
NON-TUBERCULOUS DISEASES OF BONES AND ORGANS OF LOCOMOTION	Osteomyelitis and Periostitis Discharged	..	
	Died .. ..	..	..
	Talipes Discharged	..	
	Died .. ..	..	..
	Deformities due to Poliomyelitis Discharged	..	
	Died .. ..	..	..
	Other Diseases of Bones, Joints, etc. Discharged	1	
	Died .. ..	..	..
	TOTALS Discharged	1	
	Died .. ..	..
CONGENITAL MALFORMATIONS	Hydrocephalus and Spina Bifida and Meningocele.. .. . Discharged	2	
	Died .. ..	..	4
	Congenital Pyloric Stenosis Discharged	..	
	Died .. ..	..	..
	Cleft Palate, Hare Lip Discharged	1	
	Died .. ..	..	..
	Other Congenital Malformations Discharged	..	
	Died .. ..	..	5
	TOTALS Discharged	3	
	Died	9	

ed.

[illegible]

TABLE X

Disease Group	Disease		
		0—5	6—10
DISEASES OF EARLY INFANCY	Atrophy, Debility, Marasmus, etc. Discharged	7	..
	Died	1	..
	Premature Birth Discharged	4	..
	Died	33	..
	Injury at Birth Discharged	..	9
	Died .. ..	..	..
	Other Diseases of Early Infancy Discharged	..	..
	Died	4	..
	TOTALS Discharged	11	..
	Died	47	..
VIOLENCE	Old Age, Senility, Senile Decay (not senile dementia).. . Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	..	..
	Died .. ..	..	..
	Poisoning by Coal Gas or other Gas Discharged	..	..
	Died .. ..	..	..
	Food Poisoning Discharged	..	..
	Died .. ..	..	..
	Other Poisoning Discharged	..	1
	Died .. ..	..	..
HEALTHY	Cut Throat Discharged	..	..
	Died .. ..	..	..
	Drowning and Suffocation Discharged	..	..
	Died .. ..	..	..
	Electrical Injuries and Lightning Discharged	..	..
	Died .. ..	..	..
	Burns Discharged	..	..
	Died .. ..	..	..
	Scalds Discharged	..	..
	Died .. ..	..	..
	Other Accidents associated with Fracture Discharged	..	..
	Died .. ..	..	..
	Other Accidents without Fracture Discharged	2	..
	Died .. ..	..	..
	Other Forms of Violence Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	2	..
	Died	1	..
	Ill-defined Diseases Discharged	3	..
	Died	1	..
	TOTALS Discharged	3	..
	Died	1	..
	Convalescence (<i>i.e.</i> , transferred from other Hospital) .. . Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	..	..
	Died .. ..	..	..
	Healthy Mothers Discharged	..	..
	Died .. ..	..	..
	Healthy Infants Discharged	1794	..
	Died .. ..	..	..
	Healthy (other than Mothers and Infants) Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	1794	..
	Died .. ..	..	..

CLASSIFICATION (IN DISEASE GROUPS)
IN 1935, ACCORDING
SUMMAR

Disease Group			
		0—5	6—
1. Infectious Disease	Discharged Died	6..	..
2. Cancer and Other Tumours	Discharged Died .. ..	....	..
3. Rheumatism, Diseases of Nutrition, etc.	Discharged Died .. ..	....	..
4. Diseases of Blood and Blood-forming Organs	Discharged Died .. ..	....	..
5. Chronic Poisoning	Discharged Died .. ..	....	..
6. Diseases of Nervous System and Sense Organs	Discharged Died .. ..	....	..
7. Diseases of Circulatory System	Discharged Died .. ..	....	..
8. „ Respiratory System	Discharged Died	2 4	1
9. „ Digestive System	Discharged Died	20 1	2
10. Non-Venereal Diseases of Genito-urinary System	Discharged Died	1..	..
11. Diseases of Pregnancy, Childbirth, and the Puerperal State	Discharged Died .. ..	....	..
12. Diseases of Skin	Discharged Died	3..	..
13. Non-Tuberculous Diseases of Bones and Organs of Locomotion.. .. .	Discharged Died	1..	..
14. Congenital Malformations	Discharged Died	3 9	..
15. Diseases of Early Infancy.. .. .	Discharged Died	11 47	..
16. Old Age, Senility, and Senile Decay	Discharged Died .. ..	....	..
17. Violence	Discharged Died	2 1	..
18. Ill-defined Diseases	Discharged Died	3 1	..
19. Convalescence	Discharged Died .. ..	....	..
20. Healthy	Discharged Died	1794..	..
TOTALS		1846 62	3

DISCHARGES AND DEATHS IN CRUMPSALL HOSPITAL
SELECTED LIFE PERIODS.

TABLE XI.

AGE GROUPS																	
1—15		16—25		26—40		41—50		51—60		61—70		71—80		Over 80		Totals	
		143		148		64		46		31		2		..		440	
..		9		12		8		7		8		..		..		44	
		10		25		33		40		20		..		..		128	
1	..	11		19		41		83		32		..		4		190	
		56		111		59		106		83		24		..		440	
..		..		1		1		2		6		4		..		14	
		2		13		6		4		..		..		..		25	
..		2		2		3		1		3		..		..		11	
		..		3		2		5		8		2		..		20	
..		..		1		..		..		..		..		..		1	
1	..	..		206		133		140		84		43		10		733	
..		5		10		13		37		39		15		3		121	
1	..	38		81		69		67		84		21		2		363	
..		3		20		25		41		72		31		11		203	
		106		184		139		172		190		55		10		859	
..		10		25		41		60		67		32		7		246	
		266		329		158		138		101		42		..		1056	
..		5		7		6		16		13		7		..		55	
		90		168		83		56		47		9		4		458	
..		1		3		6		11		17		8		..		46	
		165		299		27		..		..		..		..		491	
..		3		8		2		..		..		..		..		13	
		114		137		108		109		104		36		1		612	
..		..		1		2		5		6		3		1		18	
		22		22		12		9		14		4		..		84	
..		..		1		1		1		..		..		..		3	
		5		..		..		..		..		..		..		8	
..		..		..		..		..		..		..		..		9	
		1		1		..		..		..		..		..		13	
..		..		..		..		..		..		..		..		47	
		..		..		..		1		37		97		20		155	
..		..		..		..		2		30		125		43		200	
..		86		71		66		119		85		45		6		480	
..		..		1		1		3		7		10		5		28	
..		40		65		25		18		19		7		..		177	
..		1		..		..		..		..		..		..		2	
..		
..		
..		787		988		46		1		..		..		..		3616	
..		
3		2047		2851		1030		1031		907		387		53		10158	
..		49		111		150		269		300		235		74		1251	

T.

CLASSIFICATION (ACCORDING TO DISEASES)
IN 1935, ACCORDING

Disease Group	Disease		
		0—5	6—1
INFECTIOUS DISEASE	Enteric Fever Discharged	..	..
	Died .. ..	..	..
	Smallpox Discharged	..	..
	Died .. ..	..	..
	Measles Discharged	1	..
	Died .. ..	..	..
	Scarlet Fever Discharged	..	..
	Died .. ..	..	..
	Whooping Cough Discharged	1	..
	Died .. ..	..	..
	Diphtheria Discharged	..	..
	Died .. ..	..	..
	Influenza Discharged	..	..
	Died .. ..	..	..
	Influenzal Pneumonia Discharged	..	..
	Died .. ..	..	..
	Dysentery.. .. . Discharged	..	..
	Died .. ..	..	..
	Erysipelas.. .. . Discharged	..	..
	Died .. ..	..	..
	Poliomyelitis Discharged	..	..
	Died .. ..	..	..
	Acute Lethargic Encephalitis Discharged	..	..
	Died .. ..	..	..
	Cerebro-spinal Fever Discharged	..	..
	Died .. ..	..	..
	Anthrax Discharged	..	..
	Died .. ..	..	..
	Tetanus Discharged	..	..
	Died .. ..	..	..
	Tuberculosis—		
	Pulmonary, Thoracic, and Respiratory System Discharged	..	..
	Died .. ..	..	..
	Bones and Joints Discharged	..	..
	Died .. ..	..	..
	Abdominal Peritonitis Discharged	..	..
	Died .. ..	..	..
	Peripheral Glands Discharged	..	..
	Died .. ..	..	..
	Meningitis and Brain Discharged	..	..
	Died .. ..	..	..
	Skin (Lupus) Discharged	..	..
	Died .. ..	..	..
	Urino-genital Discharged	..	..
	Died .. ..	..	..
	Toxituberculide Discharged	..	..
	Died .. ..	..	..
	Bazin's Disease Discharged	..	..
	Died .. ..	..	..
	Ulceration of the Skin Discharged	..	..
	Died .. ..	..	..
	Empyema Discharged	..	..
	Died .. ..	..	..
	Fistula ..' Discharged	..	..
	Died .. ..	..	..
	Soft Palate Discharged	..	..
	Died .. ..	..	..
	Other sites and ill-defined Discharged	..	..
	Died .. ..	..	..
	Syphilis—Congenital Discharged	..	..
	Died .. ..	..	..
	Acquired Discharged	..	..
	Died .. ..	..	..
	Gonorrhœa Discharged	..	..
	Died .. ..	..	..
	Gonorrhœal Ophthalmia Discharged	1	..
	Died .. ..	..	..
	Other Venereal Disease.. .. . Discharged	..	..
	Died .. ..	..	..
	Undulant Fever Discharged	..	..
	Died .. ..	..	..
	Purulent Infection, Septicæmia (but not Puerperal).. .. . Discharged	..	..
	Died .. ..	..	..
	Malaria Discharged	..	..
	Died .. ..	..	..
	Hydatid Cysts.. .. . Discharged	..	..
	Died .. ..	..	..
	Carried forward Discharged	3	..
	Died .. ..	..	..

CHARGES AND DEATHS IN WITHINGTON HOSPITAL
SELECTED LIFE PERIODS.

AGE GROUPS																	
1—15		16—25		26—40		41—50		51—60		61—70		71—80		Over 80		Totals	
..	2	..	2	1	..	..	..	..	..	..	..	..	..	..	..	4	1
..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..
..
..	33	..	41	..	8	..	11	..	6	..	1	..	..	..	..	100	..
..	3	..	9	..	2	1	1	..	1	..	..	1	..	..	..	16	2
..	..	..	3	..	1	1	1	1	..	..	..	1	..	..	..	6	6
..	..	..	7	..	3	..	5	..	2	..	2	..	..	..	..	19	..
..	1	..	1	..	..	..	1	..	..	..	2	2	..	..	..	2	3
..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	2	..
..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	3	..
..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..
..
..	128	45	168	74	128	63	103	30	32	18	3	2	..	..	..	562	232
..	18	1	20	1	5	..	4	2	5	..	..	..	..	..	..	52	4
..	5	..	1	1	..	..	..	..	..	..	..	..	..	..	..	6	1
..	..	..	1	..	1	..	1	..	..	..	..	..	..	..	..	3	..
..	..	4	..	3	..	1	..	..	..	..	..	..	..	..	..	..	8
..	1	1	2	..	2	..	1	..	..	..	..	..	..	..	..	3	1
..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	6	2
..
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..
..
..	3	..	3	..	1	..	..	..	..	..	..	..	..	..	..	7	..
..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	2	..
..	1	..	2	..	2	..	1	..	..	..	..	..	..	..	..	6	..
..	3	..	1	..	..	..	1	..	..	..	..	..	..	..	..	5	..
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
..
..
..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
..	..	..	1	..	..	..	..	..	1	1	..	..	..	..	..	2	1
..
..
..	201	52	266	83	156	67	129	33	47	20	6	6	..	..	..	808	261

TABLE XII

Disease Group	Disease		
		0—5	6—10
INFECTIOUS DISEASE—continued	Brought forward Discharged	3	..
	Died .. ..	..	..
	Mycoses Discharged	..	..
	Died .. ..	..	..
	German Measles Discharged	..	..
	Died .. ..	..	..
	Chickenpox Discharged	..	..
	Died .. ..	..	..
	Mumps Discharged	..	..
	Died .. ..	..	..
CANCER AND OTHER TUMOURS (Malignant Disease, Carcinoma, Sarcoma, etc.)	Pemphigus Neonatorum Discharged	..	..
	Died	1	..
	Other Infectious Diseases Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	3	..
	Died	1	..
	Cancer of—Lip, Mouth, and Pharynx Discharged	..	..
	Died .. ..	..	..
	Larynx Discharged	..	..
	Died .. ..	..	..
RHEUMATISM, DISEASES OF NUTRITION AND OF ENDOCRINE GLANDS AND OTHER GENERAL DISEASES	Thorax (bronchi, lungs, mediastinum, pleura, } Discharged	..	..
	pericardium) } Died .. ..	..	..
	Esophagus Discharged	..	..
	Died .. ..	..	..
	Stomach Discharged	..	..
	Died .. ..	..	..
	Intestines (including anus, appendix, cæcum, } Discharged	..	..
	caput coli, colon, duodenum, ileum, } Died .. ..	..	..
	jejunum, rectum, sigmoid, etc.) .. .. } ..	..	..
	Pancreas Discharged	..	..
	Died .. ..	..	..
	Gall Bladder and Liver Discharged	..	..
	Died .. ..	..	..
	Peritoneum Discharged	..	..
	Died .. ..	..	..
	Respiratory Organs Discharged	..	..
	Died .. ..	..	..
	Uterus Discharged	..	..
	Died .. ..	..	..
	Other Female Genital Organs Discharged	..	..
	Died .. ..	..	..
	Breast Discharged	..	..
	Died .. ..	..	..
	Male Genito-urinary Organs Discharged	..	..
	Died .. ..	..	..
	Skin Discharged	..	..
	Died .. ..	..	..
	Other or Unspecified Organs Discharged	..	..
	Died .. ..	..	..
	Other Tumours Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	..	..
	Died .. ..	..	..
	Rheumatic Fever and Acute Rheumatism, together with } Discharged	..	..
	Sub-acute Rheumatism } Died .. ..	..	..
	Chorea Discharged	..	..
	Died .. ..	..	..
	Non-articular manifestations of so-called “Rheumatism” } Discharged	..	..
	(muscular rheumatism, fibrositis, lumbago, sciatica, } Died .. ..	..	..
	and rheumatic neuritis) .. .. . } ..	..	..
	Chronic Arthritis Discharged	..	..
	Died .. ..	..	..
	Gout Discharged	..	..
	Died .. ..	..	..
	Diabetes Mellitus Discharged	..	..
	Died .. ..	..	..
	Rickets Discharged	..	..
	Died .. ..	..	..
	Other Deficiency Diseases Discharged	..	..
	Died .. ..	..	..
	Diseases of Thyroid, etc. Discharged	..	..
	Died .. ..	..	..
	Other General Diseases Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	..	..
	Died .. ..	..	..

nued.

AGE GROUPS								
-15	16—25	26—40	41—50	51—60	61—70	71—80	Over 80	Totals
	201	266	156	129	47	6	..	808
..	52	83	67	33	20	6	..	261
..
..
..	..	..	..	1	..	..	..	1
..
..	..	..	1	..	..	..	..	1
..	..	2	..	..	..	..	..	2
..
..	201	268	157	130	47	6	..	812
..	52	83	67	33	20	6	..	262
..	..	..	..	2	4	1	..	7
..	..	..	3	5	12	8	1	29
..	..	..	..	2	2	1	..	5
..	..	2	7	16	12	4	..	41
..	1	1	..	6	9	3	..	19
..	1	4	6	10	10	10	..	31
..	2	2	3	12	9	8	..	36
..	..	1	6	5	18	11	..	41
..	..	..	..	3	1	..	..	3
..	..	..	2	1	6	1	..	2
..	..	..	..	..	..	..	..	10
..
..	..	..	..	..	1	..	..	..
..	..	2	5	6	1	2	..	1
..	..	1	4	6	4	3	..	16
..	..	1	3	7	1	2	1	17
..	..	5	4	4	1	2	..	13
..	..	1	2	8	9	1	..	21
..	..	1	3	2	5	2	2	15
..	..	..	1	5	1	2	..	3
..	..	..	..	5	5	2	..	13
..	..	1	2	1	6	2	..	2
..	..	1	1	1	1	3	..	12
..	3	5	5	2	1	..	..	16
..	..	..	..	..	2	..	1	6
..	3	17	28	55	52	19	1	178
..	..	12	37	73	90	50	4	266
..	46	52	18	14	10	2	..	142
..	5	1	4	1	2	..	..	2
..	14	47	32	22	20	11	..	13
..	..	1	..	..	..	..	..	2
..	1	11	16	38	28	12	2	146
..	..	..	..	2	7	1	..	2
..	..	..	..	..	2	..	..	108
..	5	10	4	33	36	7	..	2
..	1	1	3	4	11	3	..	95
..	..	..	..	..	..	..	..	23
..	1	4	5	1	..	1	..	..
..	4	16	3	2	1	..	1	12
1	..	1	..	..	..	..	..	28
..	13	21	10	4	5	4	..	1
..	..	..	..	..	5	3	1	57
1	89	162	92	115	104	37	3	603
..	2	3	3	8	24	7	1	48

TABLE X

Disease Group	Disease		
		0—5	6—1
DISEASES OF BLOOD AND BLOOD-FORMING ORGANS	Diseases of Blood, etc. Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	..	..
CHRONIC POISONING	Alcoholism Discharged	..	..
	Died .. ..	..	..
	Other.. .. . Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	..	..
	Died .. ..	..	..
DISEASES OF NERVOUS SYSTEM AND SENSE ORGANS, OTHER THAN ENCEPHALITIS LETHARGICA	Cerebral Abscess Discharged	..	..
	Died .. ..	..	..
	Encephalitis, including Chronic Encephalitis Lethargica.. .. Discharged	..	..
	Died .. ..	..	..
	Meningitis, other than Tuberculosis Discharged	..	..
	Died .. ..	..	..
	Tabes Dorsalis Discharged	..	..
	Died .. ..	..	..
	Disseminated Sclerosis Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Spinal Cord Discharged	..	..
	Died .. ..	..	..
	Cerebral Hæmorrhage, Embolism, and Thrombosis.. .. Discharged	..	..
	Died	7	..
	General Paralysis of the Insane Discharged	..	..
	Died .. ..	..	..
	Senile Dementia Discharged	..	..
	Died .. ..	..	..
	Other forms of Insanity Discharged	..	..
	Died .. ..	..	..
	Epilepsy Discharged	..	..
	Died .. ..	..	..
	Infantile Convulsions Discharged	..	..
	Died .. ..	..	..
	Hysteria and Hystero-epilepsy Discharged	..	..
	Died .. ..	..	..
	Neurasthenia Discharged	..	..
	Died .. ..	..	..
	Mental Deficiency (including idiocy, imbecility, and Mongolism) Discharged	..	..
	Died .. ..	..	..
	Other Disease of Nervous System (other than chorea, sciatica, and rheumatic neuritis) Discharged	..	..
	Died .. ..	..	..
	Diseases of Eye Discharged	..	..
	Died .. ..	..	..
	Diseases of Ear and Mastoid Sinus Discharged	1	..
	Died .. ..	..	..
	TOTALS Discharged	1	..
	Died	7	..
DISEASES OF CIRCULATORY SYSTEM	Pericarditis Discharged	..	..
	Died .. ..	..	..
	Endocarditis Discharged	..	..
	Died .. ..	..	..
	Valvular Disease of Heart Discharged	..	..
	Died .. ..	..	..
	Diseases of Myocardium Discharged	..	..
	Died .. ..	..	..
	Diseases of Coronary Arteries; Angina Pectoris Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Heart Discharged	..	..
	Died .. ..	..	..
	Aneurysm Discharged	..	..
	Died .. ..	..	..
	Arterio-sclerosis and Other Diseases of Arteries Discharged	..	..
	Died .. ..	..	..
	Varicose Veins, including hæmorrhoids Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Veins Discharged	..	..
	Died .. ..	..	..
	Diseases of Lymphatic System Discharged	..	..
	Died .. ..	..	..
	Abnormalities of Blood Pressure Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Circulatory System Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	..	..
	Died .. ..	..	..

nued.

AGE GROUPS								
-15	16—25	26—40	41—50	51—60	61—70	71—80	Over 80	Totals
..	7 ..	20 1	14 1	14 2	5 3	.. ..	.. ..	60 7
..	7 ..	20 1	14 1	14 2	5 3	.. ..	.. ..	60 7
..	.. ..	1 ..	1 ..	2 ..	3 ..	.. ..	.. ..	7 ..
..	.. ..	4 ..	3 ..	.. ..	.. ..	1 ..	.. ..	8 ..
..
..	.. ..	5 ..	4 ..	2 ..	3 ..	1 ..	.. ..	15 ..
..
..	1 ..	.. ..	.. ..	.. 1	.. ..	.. ..	.. ..	1 1
..	9 ..	18 ..	10 ..	4 3	2 1	.. ..	.. ..	43 7
..	.. 1	1 4	.. 2	.. ..	.. ..	1 ..	.. ..	2 7
..	.. ..	1 ..	4 1	6 ..	2 2	.. ..	.. ..	13 3
..	2 ..	10 ..	5 1	.. ..	.. ..	.. ..	.. ..	17 3
..	2 ..	1 2	3 1	1 ..	2 4	.. 1	.. ..	9 5
..	.. ..	3 ..	14 ..	30 ..	44 4	31 1	1 ..	123 5
..	.. 1	2 8	3 25	.. 47	.. 48	.. 37	.. 4	5 177
..	.. ..	1 ..	.. ..	.. ..	3 ..	6 ..	3 ..	13 ..
..	1 ..	4 ..	3 ..	4 ..	4 1	1 3	2 2	19 6
..	7 ..	12 ..	9 ..	4 ..	1 ..	1 ..	.. ..	34 ..
..	.. ..	.. 1	.. 1	.. ..	.. ..	.. ..	.. ..	.. 2
..	9 ..	.. ..	3 ..	.. ..	.. ..	.. ..	.. ..	12 ..
..	20 ..	75 ..	50 ..	30 ..	12 ..	5 ..	1 ..	193 ..
..	2 ..	1 ..	2 1	1 ..	2 ..	.. ..	.. ..	8 1
..	16 ..	19 ..	25 ..	10 ..	11 ..	6 ..	1 ..	88 ..
..	6 ..	2 ..	.. 5	3 1	5 1	1 1	.. ..	17 8
..	21 ..	1 ..	7 ..	7 ..	3 1	1 ..	.. ..	53 1
..	.. ..	3 ..	.. ..	1 1	.. ..	.. ..	.. ..	4 4
..	96 2	163 19	138 38	100 53	91 58	53 42	8 6	650 225
..	.. ..	.. 1	.. ..	.. ..	.. ..	1 ..	.. ..	1 1
..	5 1	9 2	1 3	3 ..	2 ..	.. 1	1 ..	22 7
..	15 3	23 6	19 4	6 5	8 7	5 3	.. 3	77 31
..	3 3	7 14	15 21	27 28	48 72	28 47	4 13	132 198
..	.. ..	1 ..	.. ..	.. ..	1 1	1 ..	.. ..	3 1
..	6 ..	9 4	6 2	6 5	17 10	4 7	.. 3	48 31
..	.. ..	.. ..	.. 1	1 1	3 1	.. ..	.. ..	4 3
..	.. ..	1 ..	1 ..	3 ..	12 5	11 6	4 2	32 13
..	3 ..	23 ..	18 1	12 ..	11 ..	1 ..	.. ..	68 1
..	2 ..	4 ..	1 ..	6 1	5 ..	1 ..	.. ..	19 1
..	6 ..	12 1	1 2	.. 2	1 ..	.. 1	.. ..	20 6
..	1 ..	.. 1	4 1	11 1	23 3	11 2	2 ..	52 8
..	1 1	8 1	9 ..	2 ..	5 1	.. ..	.. ..	25 3
2 ..	42 8	97 30	75 35	77 43	136 100	63 67	11 21	503 304

TABLE XI

Disease Group	Disease		
		0—5	6—10
DISEASES OF RESPIRATORY SYSTEM	Diseases of Nose and Larynx Discharged	..	..
	Died .. ..	..	..
	Bronchitis Discharged	3	..
	Died .. ..	..	..
	Bronchiectasis Discharged	..	..
	Died .. ..	..	..
	Broncho-pneumonia Discharged	..	..
	Died	1	..
	Lobar Pneumonia Discharged	..	..
	Died .. ..	..	..
	Other Pneumonia Discharged	..	..
	Died .. ..	..	..
	Empyema Discharged	..	..
	Died .. ..	..	..
	Pleurisy Discharged	..	..
DISEASES OF DIGESTIVE SYSTEM	Died .. ..	..	..
	Pulmonary Embolism Discharged	..	..
	Died .. ..	..	..
	Asthma Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Respiratory System Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	3	..
	Died	1	..
	Diseases of Teeth and Gums Discharged	..	..
	Died .. ..	..	..
	Vincent's Angina Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Tonsils (tonsillitis, etc.) Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Mouth, Pharynx, and Œsophagus Discharged	..	..
NON-VENEREAL DISEASES OF GENITO-URINARY SYSTEM	Died .. ..	..	..
	Ulcer of Stomach and Duodenum Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Stomach (excluding tumours) Discharged	..	..
	Died .. ..	..	..
	Diarrhœa and Enteritis Discharged	..	..
	Died .. ..	..	..
	Appendicitis Discharged	..	..
	Died .. ..	..	..
	Hernia Discharged	..	..
	Died .. ..	..	..
	Intestinal Obstruction Discharged	..	..
	Died .. ..	..	..
	Constipation and Other Diseases of Intestine Discharged	..	..
	Died .. ..	..	..
NON-VENEREAL DISEASES OF GENITO-URINARY SYSTEM	Cirrhosis and Other Diseases of Liver, Diseases of Gall } Discharged	..	..
	Bladder and of Pancreas } Died .. ..	..	..
	Peritonitis (non-tuberculous and without stated cause) Discharged	..	..
	Died .. ..	..	..
	Fistula-in-ano Discharged	..	..
	Died .. ..	..	..
	Ischio-rectal Abscess Discharged	..	..
	Died .. ..	..	..
	TOTALS Discharged	..	..
	Died .. ..	..	..
	Acute Nephritis Discharged	..	..
	Died .. ..	..	..
	Chronic Nephritis Discharged	..	..
	Died .. ..	..	..
	Pyelitis (including peri-nephritic abscess).. .. . Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Kidney Discharged	..	..
NON-VENEREAL DISEASES OF GENITO-URINARY SYSTEM	Died .. ..	..	..
	Diseases of Bladder and Urethra Discharged	..	..
	Died .. ..	..	..
	Diseases of Prostate Discharged	..	..
	Died .. ..	..	..
	Other Diseases of Male Genital Organs Discharged	..	..
	Died .. ..	..	..
	Diseases of Female Genital Organs Discharged
	Died
	TOTALS Discharged
	Died

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AGE GROUPS																
15	16—25		26—40		41—50		51—60		61—70		71—80		Over 80		Totals	
	14		21		3		5		4		2		1		50	
..	17	..	52	..	84	..	92	1	111	..	65	1	9	..	433	2
..	3	..	11	5	5	6	3	18	1	29	1	18	7		24	83
..	5	..	18	..	10	2	11	1	6	..	3	1	..		54	4
..	40	4	71	11	25	10	15	12	1	18	..	7	1		152	64
..	4	7	4	15	3	25	4	17	1	9	..	..	1		16	74
..	1	1	2	3	1	2	2	3	..	4	..	4	2		6	19
..	15	..	21	1	11	1	6	2	4	..	1	..	..	..	58	4
..	..	..	1	1	1	..	1	1	..	..	..	..	..	..	3	2
..	5	..	18	..	10	..	15	..	4	1	1	..	..	..	53	1
..	40	1	62	..	33	2	31	..	6	1	4	..	..	..	176	4
..	4	4	2	2	10	10	6	6	1	2	..	2	..	..	25	25
..	144	17	281	38	186	58	185	61	138	63	77	33	11	11	1025	282
	25		35		12		5		4		1		..		82	
..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..
..	113	..	75	..	12	..	3	..	3	..	..	..	..	..	207	..
..	6	..	11	..	..	1	3	..	1	..	..	..	..	..	21	1
..	20	..	85	..	48	1	4	1	9	..	..	..	..	..	202	2
..	16	1	58	1	40	8	24	2	16	1	7	..	..	..	161	13
..	1	..	6	..	2	2	4	1	1	..	1	3	..	..	16	6
..	96	1	66	1	19	..	17	..	3	..	1	..	..	..	203	2
..	21	1	38	1	26	2	19	3	11	1	4	..	..	..	119	8
..	2	..	4	..	..	1	7	4	4	1	7	2	..	..	24	8
..	32	..	46	2	33	1	20	3	17	7	13	5	2		162	20
..	2	..	22	..	37	1	24	..	14	..	8	..	2	..	109	1
..	1	..	4	3	1	4	1	4	1	1	..	1	..	..	8	13
..	1	..	2	..	..	3	1	3	..	1	..	..	..	..	4	7
..	2	..	4	..	1	..	..	..	1	..	..	..	..	..	8	..
..
..	338	3	456	8	232	24	168	21	85	12	42	11	3	2	1327	81
	3	1	5	1	1	1	..	..	1	..	..	..	..	..	10	
..	..	2	10	3	3	1	4	4	4	3	2	2	..	..	23	3
..	22	1	27	1	6	..	4	2	..	1	1	..	..	..	60	15
..	16	1	28	3	14	5	5	1	6	5	1	1	..	..	70	5
..	11	..	18	..	12	2	20	1	22	4	4	2	..	..	87	16
..	..	..	1	..	2	..	12	1	28	6	22	9	4	..	69	9
..	13	..	9	..	6	..	7	1	6	2	5	1	..	4	46	20
..	58	..	169	..	74	..	29	..	10	2	1	..	..	..	341	3
..	..	..	2	2	..	..	1	1	1	1	..	..	..	..	4	4
..	123	5	267	10	118	9	81	10	77	22	36	15	4	4	706	75

TABLE X

Disease Group	Disease		
		0—5	6—
DISEASES OF PREGNANCY, CHILDBIRTH, AND THE PUERPERAL STATE	Puerperal Pyrexia—		
	1. Women confined in hospital Discharged .. .. .	..	..
	Died .. .. .	..	..
	2. Women admitted from outside Discharged .. .. .	..	..
	Died .. .. .	..	..
	Puerperal Sepsis—		
	1. Women confined in hospital Discharged .. .. .	..	..
	Died .. .. .	..	..
	2. Women admitted from outside Discharged .. .. .	..	..
	Died .. .. .	..	..
	Post-abortive Sepsis Discharged .. .. .	..	..
	Died .. .. .	..	..
	Abortion and Threatened Abortion Discharged .. .. .	..	..
	Died .. .. .	..	..
	Ante-natal Observation, etc. Discharged .. .. .	..	..
	Died .. .. .	..	..
	Ectopic Gestation and other Accidents of Pregnancy Discharged .. .. .	..	..
	Died .. .. .	..	..
	Not Confined in Hospital	Puerperal Hæmorrhage Discharged .. .. .	..
		Died .. .. .	..
		Puerperal Albuminuria and Convulsions and } Discharged .. .. .	..
		other Toxæmias of Pregnancy } Died .. .. .	..
		Other Accidents of Childbirth Discharged .. .. .	..
		Died .. .. .	..
		Puerperal Insanity Discharged .. .. .	..
		Died .. .. .	..
		Puerperal Diseases of Breast Discharged .. .. .	..
		Died .. .. .	..
	TOTALS Discharged .. .. .	..	..
	Died .. .. .	..	..
DISEASES OF SKIN	Carbuncle, Boil Discharged .. .. .	..	..
	Died .. .. .	..	..
	Cellulitis, Acute Abscess Discharged .. .. .	..	..
	Died .. .. .	..	..
	Bedsore Discharged .. .. .	..	..
	Died .. .. .	..	..
	Dermatitis Discharged .. .. .	..	..
	Died .. .. .	..	..
	Eczema Discharged .. .. .	..	..
	Died .. .. .	..	..
	Herpes Zoster Discharged .. .. .	..	..
	Died .. .. .	..	..
	Impetigo Discharged .. .. .	..	..
	Died .. .. .	..	..
NON-TUBERCULOUS DISEASES OF BONES AND ORGANS OF LOCOMOTION	Scabies Discharged 1	1	..
	Died .. .. .	..	..
	Ulcer of Leg Discharged 1	1	..
	Died .. .. .	..	..
	Other Diseases of Skin Discharged 1	1	..
	Died .. .. .	..	..
	TOTALS Discharged 3	3	..
	Died .. .. .	..	..
CONGENITAL MALFORMATIONS	Osteomyelitis and Perlostitis Discharged 1	1	..
	Died .. .. .	..	..
	Talipes Discharged 2	2	..
	Died .. .. .	..	..
	Deformities due to Poliomyelitis Discharged .. .. .	..	..
	Died .. .. .	..	..
	Other Diseases of Bones, Joints, etc. Discharged .. .. .	..	..
	Died .. .. .	..	..
	TOTALS Discharged 3	3	..
	Died .. .. .	..	..
	Hydrocephalus and Spina Bifida and Meningocele Discharged 2	2	..
	Died	2	..
	Congenital Pyloric Stenosis Discharged 1	1	..
	Died .. .. .	..	..
	Cleft Palate, Hare Lip Discharged 1	1	..
	Died .. .. .	..	..
	Other Congenital Malformations Discharged 1	1	..
	Died .. .. .	..	..
	TOTALS Discharged 5	5	..
	Died	2	..

ed.

[illegible]

ued.

AGE GROUPS									
-15	16—25	26—40	41—50	51—60	61—70	71—80	Over 80	Totals	
..
..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	31	33
..
..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	12	..
..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	..	5
..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	43	38
..	.. ..	.. ..	.. ..	3 ..	20 12	72 38	23 29	118	79
..	.. ..	.. ..	.. ..	3 ..	20 12	72 38	23 29	118	79
..	.. ..	.. ..	.. ..	.. ..	.. ..	.. 1	.. ..	..	1
..
..	1 ..	1 ..	.. ..	.. ..	.. ..	.. ..	.. ..	2	..
..
..
..
..
..	8 ..	9 ..	6 ..	3 ..	.. ..	1 ..	1 ..	28	..
..	7 ..	3 ..	1 1	2 ..	3 1	.. ..	.. ..	17	3
..	34 ..	47 ..	50 ..	59 ..	60 1	40 ..	7 ..	298	1
..	38 ..	51 1	61 ..	32 2	32 5	17 7	1 6	243	21
..	1 1	4 ..	1 1	.. 1	1 2	1 1	.. 1	8	7
..
..	89 1	115 1	119 2	96 3	103 9	59 9	9 7	596	33
..	10 ..	28 ..	12 ..	11 ..	6 1	2 ..	.. ..	69	1
..	10 ..	28 ..	12 ..	11 ..	6 1	2 ..	.. ..	69	1
..
..
..	812 ..	1149 ..	36 ..	.. ..	.. ..	.. ..	.. ..	1997	..
..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	2088	..
..	1 ..	2 ..	2 ..	.. ..	.. ..	.. ..	.. ..	27	..
..	813 ..	1151 ..	38 ..	.. ..	.. ..	.. ..	.. ..	4112	..

CLASSIFICATION (IN DISEASE GROUPS) (IN 1935, ACCORDING SUMMARY

Disease Group			
		0—5	6—1
1. Infectious Disease	Discharged	3	..
	Died	1	..
2. Cancer and Other Tumours	Discharged	..	..
	Died .. ..	..	..
3. Rheumatism, Diseases of Nutrition, etc.	Discharged	..	..
	Died .. ..	..	..
4. Diseases of Blood and Blood-forming Organs	Discharged	..	..
	Died .. ..	..	..
5. Chronic Poisoning	Discharged	..	..
	Died .. ..	..	..
6. Diseases of Nervous System and Sense Organs	Discharged	1	..
	Died	7	..
7. Diseases of Circulatory System	Discharged	..	..
	Died .. ..	..	..
8. „ Respiratory System	Discharged	3	..
	Died	1	..
9. „ Digestive System	Discharged	..	..
	Died .. ..	..	..
10. Non-Venereal Diseases of Genito-urinary System	Discharged	..	..
	Died .. ..	..	..
11. Diseases of Pregnancy, Childbirth, and the Puerperal State	Discharged	..	..
	Died .. ..	..	..
12. Diseases of Skin	Discharged	3	..
	Died .. ..	..	..
13. Non-Tuberculous Diseases of Bones and Organs of Locomotion.. .. .	Discharged	3	..
	Died .. ..	..	..
14. Congenital Malformations	Discharged	5	..
	Died	2	..
15. Diseases of Early Infancy.. .. .	Discharged	43	..
	Died	38	..
16. Old Age, Senility, and Senile Decay	Discharged	..	..
	Died .. ..	..	..
17. Violence	Discharged	4	1
	Died .. ..	..	..
18. Ill-defined Diseases	Discharged	..	..
	Died .. ..	..	..
19. Convalescence	Discharged	..	..
	Died .. ..	..	..
20. Healthy	Discharged	2110	..
	Died .. ..	..	..
TOTALS		2175	1
		49	

CHARGES AND DEATHS IN WITHINGTON HOSPITAL
SELECTED LIFE PERIODS.

e XII.

AGE GROUPS																
15	16—26		25—40		41—50		51—60		61—70		71—80		Over 80		Totals	
..	201	52	268	83	157	67	130	33	47	20	6	6	..	..	812	262
..	6	..	17	12	28	37	55	73	52	90	19	50	1	4	178	266
..	89	2	162	3	92	3	115	8	104	24	37	7	3	1	603	48
..	7	..	20	1	14	1	14	2	5	3	..	..	..	..	60	7
..	..	..	5	..	4	..	2	..	3	..	1	..	..	..	15	..
..	96	2	163	19	138	38	100	53	91	58	53	42	8	6	650	225
..	42	8	97	30	75	35	77	43	136	100	63	67	11	21	503	304
..	144	17	281	38	186	58	185	61	138	63	77	33	11	11	1025	282
..	338	3	456	8	232	24	168	21	85	12	42	11	3	2	1327	81
..	123	5	267	10	118	9	81	10	77	22	36	15	4	4	706	75
1	306	..	556	7	40	1	..	..	..	..	..	..	..	..	902	9
..	154	1	191	1	97	1	98	5	71	7	31	3	4	..	650	18
..	22	..	22	1	15	1	12	1	6	3	3	..	..	1	83	7
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	43	38
..	..	..	..	..	..	..	3	..	20	12	72	38	23	29	118	79
..	89	1	115	1	119	2	96	3	103	9	59	9	9	7	596	33
..	10	..	28	..	12	..	11	..	6	1	2	..	..	..	69	1
..
..	813	..	1151	..	37	..	..	..	..	..	..	..	..	..	4112	..
..
1	2441	91	3798	214	1367	277	1147	313	944	424	501	281	77	86	12457	1737

TABLE XIII.
SHOWING DISTRIBUTION OF DISCHARGES AND DEATHS, BOOTH HALL HOSPITAL, 1935, AMONG WARDS OF THE CITY, ACCORDING TO DISEASES.

TABLE XIII.—continued

		CITY WARD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Disease		1. All Saints	2. Ardwick	3. Beswick	4. Buckley	5. Bradford	6. Cheetham	7. Chorlton-cum-Hardy	8. Collegiate Church	9. Collyhurst	10. Cramhall	11. Didsbury	12. Exchange	13. Gorton North	14. Gorton South	15. Harpurhey	16. Levenshulme	17. Longsight	18. Medlock Street	19. Miles Platting	20. Moston	21. Moss Side E.	22. Moss Side W.	23. New Cross	24. Newton Heath	25. Openshaw	26. Oxford	27. Rusholme	28. St. Ann's	29. St. Clement's	30. St. George's	31. St. John's	32. St. Luke's	33. St. Mark's	34. St. Michael's	35. Withington	36. Wythenshawe	37. Outside the City	38. No settled abode	Other including Staff Cases	Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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TABLE XIII.--Continued

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BOOTH HALL HOSPITAL.

DISTRIBUTION OF 1935 DISCHARGES AND DEATHS AMONG WARDS OF THE CITY ACCORDING TO DISEASE GROUPS.

SUMMARY OF TABLE XIII.

CITY WARDS

TABLE XIV.
SHOWING DISTRIBUTION OF DISCHARGES AND DEATHS, CRUMPSALL HOSPITAL, 1935, AMONG THE WARDS OF THE CITY, ACCORDING TO DISEASES.

TABLE XIV—continued.

CITY WARDS

Disease		1. All Saints	2. Ardwick	3. Beswick	4. Blackley	5. Bradford	6. Cheetham	7. Chorlton-cum-Hardy	8. Collegiate Church	9. Collyhurst	10. Crumpsall	11. Didsbury	12. Exchange	13. Gorton North	14. Gorton South	15. Harpurhey	16. Levenshulme	17. Longsight	18. Medlock Street	19. Miles Platting	20. Moston	21. Moss Side E.	22. Moss Side W.	23. New Cross	24. Newton Heath	25. Openshaw	26. Oxford	27. Rusholme	28. St. Ann's	29. St. Clement's	30. St. George's	31. St. John's	32. St. Luke's	33. St. Mark's	34. St. Michael's	35. Wilkington	36. Wythenshawe	37. Outside the City	38. No settled abode	Other (including Staff Cases)	Totals		
Brought forward .. .		19	7	18	8	23	6	3	38	29	6	1	1	1	4	16	2	2	5	7	7	7	2	41	17	4	9	2	10	6	24	3	30	5	1	20	18	35	436		
Mycoses .. .		1	1	1	4	5	7	4	2	1	1	4	4	2	3	1	2	6	24	..	2	5	
German Measles		
Chickenpox	1		
Mumps		
Pemphigus Neonatorum		
Other Infectious Diseases	1	1		
TOTALS .. .		19	7	19	8	24	6	3	38	29	6	2	2	1	4	16	2	2	5	7	7	7	2	11	17	4	9	2	10	6	24	3	30	5	1	20	18	36	440		
Cancer of—Lip, Mouth, and Pharynx	1	1	1	1	2	..	3	2	1	4	1	1	13	
Larynx	2	1	1	1	4	2	1	2	17	
Thorax (bronchi, lungs, mediastinum, pleura, pericardium)	2	1	..	1	1	1	1	1	1	1	1	2	7		
Oesophagus	1	..	1	2	2	1	1	1	1	..	2	1	3	1	2	2	1	2	21
Stomach	1	1	1	..	1	..	1	1	1	2	1	1	1	..	2	4	1	10	
Intestines (including anus, appendix, cecum, caput, coli, colon, duodenum, ileum, jejunum, rectum, sigmoid, etc.)	3	..	2	3	..	1	2	5	3	1	1	3	1	2	3	..	2	2	2	1	7	2	3	3	..	1	2	35	
Pancreas	1	1	1	1	2	..	2	3	3	1	3	2	2	1	4	1	1	4	1	32		
Gall Bladder and Liver	1	1	1	1	3	1	1	1	2	4		
Peritoneum	2	1	..	1	..	1	1	1	2	1	1	1	16		
Respiratory Organs	1	1	1	1	..	2			
Uterus	2	3	1	..	1	..	1	3	1	2	1	1	1	..	2	1	..	2	1	2	..	1	13	14		
Other Female and Genital Organs	1	1	2	1	1	..	2	2	1	..	1	2	..	1	1	..	1	2	..	1	1	10	9		
Breast	2	1	1	1	..	1	1	1	3	1	3	2	11	6		
Male Genito-urinary Organs	1	1	2	..	1	1	1	3	3		
Skin	1	1	1	..	3	1	1	6	1		
Other or Unspecified Organs	1	1	1	1	1	1	1	2	2	1	..	3	1	..	1	1	1	..	4	2	1	1	1	18		
Other Tumours .. .		1	2	1	1		
TOTALS .. .		1	1	9	9	7	4	..	7	7	6	8	1	3	6	9	..	1	12	16	3	3	2	..	1	3	..	2	19	..	8	5	2	9	128		
Rheumatic Fever and Acute Rheumatism, together with Sub-acute Rheumatism	7	5	7	5	..	3	8	1	5	6	1	11	9	..	1	5	..	2	1	..	9	3	1	90	
Chorea	1	2	1	1	1	1	4	6		
Non-articular manifestations of so-called "Rheumatism" (muscular rheumatism, fibrositis, lumbago, sciatica, and rheumatic neuritis)	3	4	12	8	..	16	10	3	3	6	3	22	7	..	1	3	..	1	..	17	..	3	4	..	4	130			
Chronic Arthritis	1	4	5	1	4	..	3	3	1	..	1	..	1	1	..	5	1	4	5	..	1	3	..	1	..	7	5	..	1	2	59		
Gout	1																				

TABLE XIV—continued

TABLE XIV.—continued

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TABLE XIV.—continued

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SUMMARY OF TABLE XIV.

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TABLE XV—continued

SHOWING DISTRIBUTION OF DISCHARGES AND DEATHS, WITHINGTON HOSPITAL, 1935, AMONG WARDS OF THE CITY, ACCORDING TO DISEASES.

TABLE XV.—continued

CITY WARDS

TABLE XV—continued

TABLE XV—continued.

TABLE XV.—continued

TABLE XV.—continued

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DISTRIBUTION OF DISCHARGES AND DEATHS, WITHINGTON HOSPITAL, 1935, AMONG THE WARDS OF THE CITY ACCORDING TO DISEASE GROUPS.

SUMMARY OF TABLE XV.

TABLE XVI.
CLASSIFICATION (BY DISEASE GROUPS) OF DAYS OF MAINTENANCE OF PATIENTS
DISCHARGED FROM OR DYING IN THE GENERAL HOSPITALS, 1935.

DISEASE GROUP	BOOTH HALL		CRUMPSALL		WITHINGTON		TOTALS	
	Total Days	Average Stay	Total Days	Average Stay	Total Days	Average Stay	Total Days	Average Stay
1. Infectious Disease	16,096	34·69	20,937	43·26	79,634	74·14	116,667	57·69
2. Cancer and other Tumours	79	19·75	22,189	69·78	14,344	32·31	36,612	47·80
3. Rheumatism, Diseases of Nutrition, etc.	17,161	57·01	34,068	75·04	22,435	34·46	73,664	52·39
4. Diseases of Blood and Blood-forming Organs	120	20·00	1,159	32·18	4,384	65·43	5,663	51·95
5. Chronic Poisoning	—	—	307	14·62	106	7·07	413	11·47
6. Diseases of Nervous System and Sense Organs	9,225	30·65	36,155	42·34	49,984	57·12	95,364	46·97
7. Diseases of Circulatory System	7,142	49·94	23,268	41·11	36,489	45·22	66,899	44·13
8. Diseases of Respiratory System	25,826	29·68	31,223	28·25	42,511	32·53	99,560	30·34
9. Diseases of Digestive System	14,271	8·23	28,141	25·33	37,536	26·66	79,948	18·80
10. Non-Venereal Diseases of Genito-Urinary System	4,396	41·50	14,929	29·62	26,690	34·17	46,015	33·10
11. Diseases of Pregnancy, Childbirth, and the Puerperal State	—	—	7,153	14·19	19,583	21·50	26,736	18·89
12. Diseases of Skin	11,291	23·77	17,899	28·41	28,020	41·95	57,210	32·27
13. Non-Tuberculous Diseases of Bones and Organs of Locomotion	4,153	90·27	7,347	84·45	7,175	79·72	18,675	83·74
14. Congenital Malformations	1,488	39·16	226	13·29	1,947	278·14	3,661	59·05
15. Diseases of Early Infancy	3,298	34·00	665	11·08	2,849	35·17	6,812	28·62
16. Old Age, Senility, and Senile Decay	—	—	36,075	101·62	6,299	31·97	42,374	76·77
17. Violence	8,123	21·55	13,576	26·72	23,014	36·59	44,713	29·53
18. Ill-defined Diseases	4,551	16·61	2,943	16·44	3,470	49·57	10,964	20·96
19. Convalescence	1,833	48·24	—	—	—	—	1,833	48·24
20. Healthy (including Mothers and Infants)	889	10·10	57,884	16·01	52,054	12·66	110,827	14·18
Totals	129,942	24·23	356,144	31·22	458,524	32·30	944,610	30·51

TABLE XVII.

**SOURCES OF ADMISSION OF PATIENTS DISCHARGED
FROM OR DYING IN GENERAL HOSPITALS
DURING THE YEAR ENDED
31st DECEMBER, 1935.
(Excluding Births).**

Source of Admission	Booth Hall Hospital	Crumpsall Hospital	Withington Hospital	Totals
District Medical Officer ..	519	3,485	2,078	6,082
General Practitioner ..	2,056	2,684	5,750	10,490
Voluntary Hospital.. ..	948	707	862	2,517
*City Institution	265	614	212	1,091
*City Hospital	176	92	125	393
Other	†1,335	†2,037	†2,899	6,271
†Staff Cases	15	27	139	181
§Maternity and Child Welfare Centres	12	24	—	36
§Accident Ward	36	10	84	130
Totals	5,362	9,680	12,149	27,191

* Transfers.

† Includes Staff from Corporation establishments other than Public Health.

‡ At Booth Hall Hospital the classification " Other " includes cases sent in by Education Department and the Central Public Health Office. Maternity cases classified as " Other " at Withington and Crumpsall Hospitals.

§ Information given is for the second half of the year only.

TABLE XVIII.

**EXAMINATIONS MADE AT THE CRUMPSALL
PATHOLOGICAL LABORATORY DURING THE
YEAR ENDED 31st DECEMBER, 1935.**

	Crumpsall Hospital	Booth Hall Hospital	Withington Hospital	Total for all Hospitals
Diphtheria tests	70	13,000	105	13,175
Sputum tests for tubercle bacilli	1,514	509	4,251	6,274
Stomach washings for tubercle bacilli	Nil	17	Nil	17
Smears for Gonococcus	1,452	91	189	1,732
Blood—				
Wassermann reaction	1,132	106	1,214	2,452
Count	447	46	696	1,189
Reticulocyte	119	Nil	249	368
Sugar	1,340	5	1,590	2,935
Urea	312	43	487	842
Culture	39	10	35	84
Agglutination	20	20	40	80
Grouping	141	7	18	166
Calcium	3	4	9	16
Bleeding time	2	7	4	13
Coagulation time	1	8	5	14
Van den Bergh	9	2	14	25
Sedimentation	29	Nil	2	31
Urine—				
Microscopical examination	769	140	749	1,658
Cultural examination	700	173	753	1,626
Chemical examination	144	3	137	284
Chlorides	22	Nil	Nil	22
Fæces—				
Microscopical examination	9	8	49	66
Cultural examination	16	46	42	104
Occult blood	93	12	117	222
Cerebro-spinal Fluid—				
Microscopical examination	182	157	226	565
Cultural examination	24	28	15	67
Chemical examination	143	109	176	428
Lange colloidal gold	49	1	29	79
Wassermann	80	4	150	234
Pus—				
Microscopical examination	78	106	86	270
Cultural examination	56	65	61	182
Exudates, effusions—				
Microscopical examination	55	28	92	175
Cultural examination	14	6	23	43
Pregnancy test (Friedman)	30	1	111	142
Tumours	265	25	266	556
Post-mortem examination	140	74	45	259
Fractional gastric analysis	131	4	326	461
Vaccines	121	12	37	170
Basal metabolic rate estimation	Nil	Nil	29	29
Hairs, etc.—Ringworm parasite	2	92	2	96
Carried forward	9,753	14,969	12,429	37,151

TABLE XVIII—continued.

	Crumpsall Hospital	Booth Hall Hospital	Withington Hospital	Total for all Hospitals
Brought forward	9,753	14,969	12,429	37,151
Miscellaneous, including :— Sputa, for cells; elastic tissue; special organisms; hooklets; pneumococcus typing. Urines, for diastatic index; phenol red test. Fæces, for cells; parasitic ova. Blood, for red cell fragility test; ieterus index; spec- toscopic examination; serum cholesterol; phosphorus; phosphatase. Malaria parasites; chlorides. Milk examinations.. .. .	20	9	51	80
Total.. .. .	9,773	14,978	12,480	37,231
In addition, a few tests have been done for institutions other than the above hospitals :—	Styal Cottage Homes	Rose Hill Convalescent Home	Swinton Home	
Milks.. .. .	1	1	Nil	
Diphtheria swabs	Nil	263	52	
Swabs for examination for hæmolytic streptococci	Nil	106	Nil	
	1	370	52	423
				37,231
Total examinations for 1935				37,654

The following figures show how the volume of work has increased during the past six years :—

Year ending December 31st	Number of examinations
1930	19,252
1931	21,611
1932	28,393
1933	29,611
1934	31,623
1935	37,654

There has been an increase during 1935 of more than 6,000 examinations over the total for the previous year. The table below gives the figures in respect of certain classes of examinations for the last three years :—

Tests	1933	1934	1935	Increase for 1935 over 1933	
				Total	Per cent.
Sputum (T.B.)	4,592	5,193	6,274	1,682	36·6
Wassermann	1,799	1,812	2,686	887	49·3
Blood— Count	574	1,247	1,557	983	171·2
Sugar	1,655	1,511	2,935	1,280	77·3
Urea	432	716	842	410	94·9
Grouping	69	65	166	97	140·5
Urine— Microscopical	576	1,250	1,658	1,082	187·8
Culture	314	1,352	1,626	1,312	417·8
Cerebro-spinal fluid— Microscopical	290	640	565	275	94·8
Chemical	242	496	428	186	76·9
Pregnancy (Friedman)	58	102	142	84	144·8
Fractional gastric analysis	66	162	461	395	598·4
Tumours	445	380	556	111	24·9
Post-mortems	168	134	259	91	54·1

CONVALESCENT HOME WORK.

The conditions under which the convalescent home work of the department is carried on have been described in previous reports. The following details refer to the work carried out by this section of the department in 1935 :—

HOSPITALS ADMINISTRATION SECTION.

Report relating to Persons recommended for Convalescent Home Treatment during the year ended 31st December, 1935.

Number on books January 1st	.. .. .	160	
Number admitted January 1st to December 31st	Adults	239	
	Children	385	624
		—	
Number discharged January 1st to December 31st	Adults	237	
	Children	395	632
		—	
Number contained on books December 31st, 1935	.. ..		152

Admissions				Discharges	
Adults	Children			Adults	Children
23	72	....	March quarter	17	64
81	110	....	June „	80	107
82	147	....	September „	80	145
53	56	....	December „	60	79
—	—			—	—
239	385			237	395

Summary of Admissions.

Class	Number of Patients	Name of Home, etc.
Adults	211	Southport Convalescent Hospital, Southport.
	6	Devonshire Hospital, Buxton.
	19	Lear Home of Recovery, West Kirby.
	3	Royal Alexandra Hospital, Rhyl.
Children	363	Dr. Garrett Memorial Home, Conway.
	4	Royal Alexandra Hospital, Rhyl.
	18	Children's Convalescent Home, West Kirby.
	624	

Journeys.

March quarter	8
June quarter	8
September quarter	13
December quarter	11
	—
Total	40

Outfits of Clothing.

The amounts expended on the provision of clothing to enable patients to proceed to convalescent homes during the year ended 31st December, 1935, was as follows :—

	£	s.	d.	
Public Health Committee ..	38	0	8	March quarter.
	94	12	3	June quarter.
	216	1	4	September quarter.
	97	15	6	December quarter.
Public Assistance Committee..	86	14	4	March quarter.
	89	6	2	June quarter.
	117	7	3	September quarter.
	175	18	3	December quarter.
	<u>£915</u>	<u>15</u>	<u>9</u>	

Summary of Discharges.

Name of Home, etc.	Persons Discharged during Year ended 31st December, 1935
Dr. Garrett Memorial Home ..	244 to parents " fit." 24 to Booth Hall Hospital for final examination. 58 to Booth Hall Hospital for observation. 1 to Booth Hall Hospital for renewal of splint. 1 to Booth Hall Hospital then for transfer to Styal Homes. 9 to Dr. Rhodes' Memorial Home.
Children's Convalescent Home ..	10 to parents " fit."
Royal Alexandra Hospital	5 to parents " fit."
Royal Alexandra Hospital	1 to home " improved."
Southport Convalescent Hospital	209 to homes " improved."
Devonshire Hospital	7 to homes " improved."
Lear Home of Recovery	18 to homes " improved."

Children Discharged on Demand of their Parents.

Name of Home, etc.	Number of Children Demanded. Year ended 31st December, 1935
Dr. Garrett Memorial Home ..	44
Children's Convalescent Home ..	1

All the cases of infectious disease and other illnesses during the year have been at the Dr. Garrett Memorial Home, Conway, and were as follows :—

Number	Illness
2	German measles.
15	Diphtheria.
23	Chicken-pox
1	Broken clavicle.
1	Cut chin.
3	Pleurisy.
2	? Pneumonia.
1	Heart relapse and temperature.
1	? Scabies.
1	Cut eyelid.
1	Incised gland.
2	Rise of temperature.
1	? Diphtheria.
1	Scarlatina.
1	? Diphtheria or scarlatina.
1	Splinter in hand.
1	Wart on foot.
1	Croup.
7	Mumps, mild.
—	
66	
—	

In 1935 there were 239 adults and 385 children given convalescent treatment as against 150 adults and 353 children in 1934, showing an increase in each case.

In 1935 the discharges showed 237 adults and 395 children as against 150 adults and 355 children in 1934. An increase is also noted here.

The increase in numbers of patients recommended for convalescent treatment is due to the fact that (a) more adults are now being recommended from the City hospitals and (b) more children are being recommended through the Welfare Centre doctors.

During the year the number of journeys has increased by six.

The amount of money expended on outfits of clothing during the year shows an increase of £286 16s. 8d. on the amount expended in 1934. The Public Health account shows an increase of £216 3s. 2d. and the Public Assistance account an increase of £70 13s. 6d.

During the year four children attempted to abscond from the Dr. Garrett Memorial Home, Conway. Two boys made the first attempt, and at a later date an attempt was made by two girls. All these children were safely returned to the Home.

DOMICILIARY MEDICAL SERVICES.

On October 30th, 1935, the City Council approved a report of the Public Health Committee, recommending the abolition of the existing scheme of domiciliary medical service for the sick poor, and recommending the formation of a new type of service based on lines comparable with the National Health Insurance system of panel service.

This result was only achieved after several years of investigation and consideration. The need for some radical alteration in the system of providing domiciliary medical service was recognised by the Public Health Committee in 1931, when, in consequence of their investigation into complaints arising out of the service, the Committee were profoundly impressed by the anomalies and inequalities of the existing scheme.

In October, 1931, and again in April, 1932, reports on the service were submitted by the Medical Officer of Health to the Public Health Committee. In September, 1932, the Public Health Committee approached the Public Assistance Committee on the matter, and from that time up to September, 1935, the scheme was the subject of frequent meetings of committees, conferences of representatives, and discussions between officers.

These negotiations culminated in the preparation of a report in which were set forth all the matters which had been discussed and all the arguments for and against various alternative schemes considered during the four years. The report submitted the final issues to the Council for decision.

The report is too lengthy for inclusion here, but it may be stated that the case for the proposed change was based on the following facts:—

- (1) That a major change has taken place in the post-war years in the type of person needing public medical treatment, and that, whereas the sick poor in 1919, for example, were mainly aged and infirm persons of no estate and no working capacity, thousands of the people who to-day require medical treatment at the public expense are employable persons whose need for assistance arises out of economic changes which have occurred since the Great War.
- (2) The inadequacy of the treatment accorded to patients under the present system. With a system under which single medical officers are required to undertake the care of three or four thousand patients it is obvious that "rushed" physical examinations and therefore insufficiently considered treatments cannot be avoided.
- (3) Frequent complaints have been received from patients of the insufficiency of the medical service rendered to them, and on many occasions it has been established that pressure of work on the medical officer has made possible the grounds upon which the complaint has arisen.
- (4) The absence of any freedom of choice either by patient or doctor.

The following alternative forms of reorganisation were considered :—

1. Recasting the present districts and increasing the number of part-time medical officers.
2. Replacement of part-time medical officers by full-time medical officers.
3. Abolition of the district system and substitution of an “open choice” system organised on lines comparable with the National Health Insurance panel system. The adoption of an “open choice” system necessitated a decision as to the basis of payment of practitioners rendering service, and consideration was given to (a) payment by capitation fee and (b) payment out of a fixed pool.

The Council decided in favour of an “open choice” system with payment of practitioners by capitation fee. The sum of 9s. per patient per annum has been fixed as the fee. The scheme is estimated to cost the Council approximately £13,000 per annum more than the present system.

The scheme has been provisionally approved by the Ministry of Health, and the work of preparing a detailed administrative scheme is at present engaging the attention of the Public Health and Public Assistance Committees. This administrative scheme, when prepared, will be submitted to the Ministry of Health, and, presumably, if the Ministry are satisfied, sanction to the necessary departures from the Public Assistance Order of 1930 will be issued by the Minister in due course.

PUBLIC VACCINATION.

The number of public vaccinators is 26, and there are four vaccination officers.

The percentage of infants successfully vaccinated in Manchester—52·17 per cent. in 1934—continues to be considerably higher than in England and Wales as a whole. The percentages for each of the five years 1929–1933 were :—

	England and Wales	Manchester
1929	39·9	52·8
1930	40·1	52·5
1931	39·0	51·7
1932	38·2	52·45
1933	37·0	52·17

The following is a summary of the return made to the Ministry of Health of vaccinations for the year *1934 :—

	Total	Percentage
Number of successful vaccinations.. .. .	6,503	52·17
Number insusceptible of vaccination	37	0·30
Number of exemptions	3,890	31·21
Number died unvaccinated	703	5·64
Number not traceable : removed to other districts or postponed	1,331	10·68
Number of children born	12,464	100·00

* Returns for vaccination are always for the year preceding the year covered by this report. This is unavoidable, since the period of four months from the date of birth is allowed for exemption purposes.

WORK DONE BY THE MIDWIVES' SECTION.

This section deals with :—

- A. THE INSPECTION OF MIDWIVES under the Midwives Acts, 1902–1926.
- B. DOMICILIARY NURSING VISITS TO MOTHERS AND BABIES, in connection with schemes for maternity and child welfare under the Maternity and Child Welfare Act, 1918.
- C. THE INVESTIGATION OF CASES OF—
 - (i.) Maternal death.
 - (ii.) Puerperal fever and pyrexia.
 - (iii.) Emergency neo-natal deaths in midwives' practices.
 - (iv.) Pemphigus neonatorum.

STAFF—

- Inspector of Midwives.
- Assistant Inspector of Midwives.
- 4 Maternity Nurses.
- 3 Ophthalmic Nurses. (See special report.)

A. Inspection of Midwives.

Visits made to midwives in their own homes	799
Midwives interviewed at the office	89
Total registered births for the City (adjusted figure)—	
Live births	11,276
Still births	546
	<hr style="width: 100px; margin-left: 0;"/> 11,822
Total notified births (live and still-unadjusted figure) ..	<u>12,921</u>

Occurrence of Notified Births.

(1) Births at Home	6,258
(i.) Taken by midwives, including cases in which midwife acts as maternity nurse (figures based on yearly return of cases made by midwives to L.S.A.	5,294
(ii.) Taken by doctors (no midwife present) ..	110
(iii.) Taken by St. Mary's Hospital District Staff in Manchester area	854
(2) Births in Institutions.	
(i.) Hospitals	5,903
(ii.) Maternity homes registered under Nursing Homes Registration Act, 1927	760
	<hr style="width: 100px; margin-left: 0;"/> 6,663
	<u>12,921</u>

Number of Midwives in Practice.

198 midwives gave notice of intention to practice during 1935. Of the independent practising midwives, during the year, 4 gave up work and 2 new midwives started to practice.

Of the 198 midwives 31 of these were employed in registered maternity homes having no resident medical practitioner, and 28 were attached to District Nursing Associations. The remaining 139 were independent midwives doing domiciliary work. 27 of these resided outside the area. An analysis of all the cases taken by midwives is given in the following table :—

TABLE I.
ANALYSIS OF CASES TAKEN BY MIDWIVES.

Midwives giving notice of intention to practice in the Manchester Area	Number of Midwives	Midwife only at the Case		Midwife with Doctor called in		Midwife as Maternity Nurse	Total Number of Cases	Per cent. of Notified Births
		Primi-paræ	Multi-paræ	Primi-paræ	Multi-paræ			
I. BIRTHS AT HOME.								
Independent Midwives—								
(a) Certificated (Manchester Area) ..	106	693	2,571	298	469	697	4,726	36.57
(b) Bona-fide (Manchester Area) ..	1	9	23	..	..	6	38	0.29
(c) Certificated (Manchester Area), did no work	6	..	..	..	..	..	..	..
(d) Certificated (reside outside Manchester)	21	41	97	8	18	21	185	1.43
(e) Certificated (reside outside Manchester), did no work	5	..	..	..	..	..	..	..
Midwives employed by Nursing Associations:—								
Manchester	25	41	184	25	16	79	345	2.67
Salford	2							
County Nursing Associations	1							
	167	782	2,875	331	503	803	5,294	
BIRTHS IN INSTITUTIONS.								
Midwives employed in registered Maternity Homes taking midwifery cases only and having no resident medical practitioner ..								
	31	249	176	43	16	276	760	5.88
	198	1,031	3,051	374	519	1,079	6,054	46.85

Of the 113 independent midwives residing in Manchester, 6 took no cases; the remaining 107 took 4,764 cases. These were distributed among them as follows :—

TABLE II.

	Number of Midwives	Number of Cases taken	Per cent. of Total Number of Cases	Average Number of Cases per Midwife
Practices of over 100 cases per annum ..	11	1,398	29.3	127.0
Under 100, over 50	27	1,961	41.1	72.6
Between 20 and 50	32	1,100	23.0	34.3
Under 20	37	305	6.4	8.2

The total number of cases taken by midwives shows a decrease of 20 against a decrease of 134 of all notified births.

Per cent.
Notified
Births

Distribution of all Domiciliary Cases (based on Notified Births).

6,258 births took place in domiciliary practice .. = 48.43

Distributed as follows :—

See Table II.—

Midwives only at the birth	3,657	= 28.30
Registered medical practitioner summoned by midwife under C.M.B. rules and present at birth	834	} = 13.52
Registered medical practitioner with midwife as maternity nurse	803	
Registered medical practitioner alone	110	
Hospital District Service	854	= 6.60

The proportion of cases taken by midwives and midwives acting as maternity nurses, calculated on registered live births, is as follows :—

	Per cent.
1931	56.75
1932	54.94
1933	52.34
1934	52.61
1935	53.69

Supervision and Instruction of Midwives.

Midwives were suspended from work on 120 occasions on account of contact with infection or being themselves liable to be a source of infection.

As there is a staff of trained nurses available to take over their cases, midwives are encouraged to report cases with raised temperature before they become notifiable under the Puerperal Pyrexia Regulations.

Suspensions.

1931	.. ..	129 = 1·85 per 100 cases taken.
1932	.. ..	88 = 1·35 ,, ,,
1933	.. ..	92 = 1·57 ,, ,,
1934	.. ..	79 = 1·31 ,, ,,
1935	.. ..	120 = 1·98 ,, ,,

No serious breach of the Rules of the Central Midwives Board has occurred during the year.

Handywomen.

In 4 cases of puerperal fever and 1 of puerperal pyrexia, there was no midwife in attendance. In each case the handywoman who assisted the doctor was visited and instructed *re* disinfection.

Special Work on Septic Infections.

The routine taking of swabs from the midwives concerned in all cases of puerperal pyrexia was discontinued in October, 1934, as sufficient cases had then been examined for the special research work into puerperal fever.

During 1935, swabs were taken from the nose and throat of the midwives concerned in all cases of puerperal pyrexia occurring in maternity homes. Twelve swabs were examined. Two midwives were found to have hæmolytic strepto-cocci in the throat. Further swabs were taken at weekly intervals. One was clear within the week ; one cleared in five weeks. The two midwives were suspended from attending to the maternity patients during the time, pending a negative swab result.

Lectures.

A series of 6 post-graduate lectures given by specialists, in the autumn, were much appreciated by the midwives and well attended.

Practical Training of Midwives.

Seven midwives are approved by the Board to take pupil midwives for district experience.

Payment to Midwives by the Local Authority.

1. Under the Midwives Act, 1926, section 2 (1), for loss of work during suspension—9 claims	£ s. d. 17 7 0
2. For non-booked cases taken as emergencies (including abortion—16 claims	12 16 6
3. By resolution of the City Council, August 3rd, 1932, 10s. may be paid to a midwife who loses her fee because she has sent a booked case to an Infant Welfare Ante-Natal Clinic and the case has subsequently been transferred to hospital prior to or during delivery. 20 claims	10 0 0
4. By resolution of the City Council, July 2nd, 1935, payments may be made to midwives in necessitous cases—35s. for a primipara, and 30s. for a multipara. 35 claims	52 10 0

Records of Calling-in Medical Aid.

Records of calling in medical aid in accordance with the Rules of the Central Midwives Board were sent in by the independently practising midwives, by midwives from District Nursing Associations, and by midwives in Registered Maternity Homes having no resident medical officer. The number of records sent and the number of applications for payment of their fee by registered medical practitioners is shown below :—

TABLE III.

	Number of Midwives' Own Cases	Number of Records Sent	Number of Records Sent per 100 Cases	Number of Applications for Payment	Number of Applications made per 100 Records
1930	6,142	3,236	52·6	1,718	53·0
1931	5,842	2,874	49·1	1,598	55·6
1932	5,474	2,538	46·3	1,500	59·1
1933	4,901	2,413	49·2	1,455	60·2
1934	5,033	2,470	49·0	1,477	59·9
1935	4,975	2,552	51·2	1,642	64·3

It will be noticed that the proportion of cases for which medical aid is sought has remained fairly constant for the last few years, as has also the number of applications by medical practitioners for payment of fees.

Number of cases referred by midwives to pre-maternity clinics in addition to above figures :—

1930	..	..	405	=	6.59	per cent. of their cases.
1931	..	..	338	=	5.78	„ „
1932	..	..	211	=	3.85	„ „
1933	..	..	208	=	4.24	„ „
1934	..	..	294	=	5.84	„ „
1935	..	..	434	=	8.72	„ „

This does not give a true picture of the number of women who attend ante-natal clinics and are later delivered by midwives, as in many cases the mother goes to the clinic before she books her midwife, and the written record of having referred a patient to the clinic is not in that case always sent to the Local Supervising Authority.

The next table shows how many calls for assistance were made, and by whom, during the ante-natal, intra-natal, and post-natal periods :—

TABLE IV.

	Records sent to Doctors		Records sent to Ante-natal Clinics
	Assistance in labour and puerperium	Assistance during pregnancy	
Midwives	1,885 sent by 93 midwives	401 sent by 59 midwives	434 sent by 55 midwives
District Nursing Association ..	51	28	7
Maternity Homes	177	10	—

15.5 per cent. of all records of sending for medical aid by midwives for emergencies during labour and the puerperium were for delayed labour, and 24.0 per cent. for a ruptured perineum. This is respectively 8.0 per cent. and 12.3 per cent. of all their cases, and compares with 8.0 per cent. and 12.4 per cent. for 1934.

51.0 per cent. of all the records were sent for assistance during labour. 31.7 per cent. were for unsatisfactory conditions occurring during the puerperium. Of these 21.9 per cent. were for the infant.

Payment of Medical Fees.

Payment of fee of the registered medical practitioner called in by the midwife, in accordance with the Rules, is made by the Local Supervising Authority under the authority of the Midwives Act, 1918, section 14 (1). The Local Supervising Authority has power to recover the fee from the patient, or husband, if they have the means to pay.

Particulars of applications in 1935 for the payment of fees :—

	1934	1935
Number of families whose incomes were below the scale ..	805	929
" " " " above the scale ..	555	577
" " who paid doctor themselves	15	8
Conditions not fulfilled	19	16
No account sent (see Ophthalmia Neonatorum Regulations, 1926)	83	112
Number of fees paid by the Local Supervising Authority ..	1,443	1,618

Provision of the Services of Consultants for Difficult Child-birth.

Second Opinion.—Under the Notification of Puerperal Fever and Puerperal Pyrexia Regulations, 1926, a second opinion on his case may be obtained by a registered medical practitioner. A fee of £3 3s. for the consultation is payable by the Public Health Committee.

	1934	1935
The number of such fees paid was	8	9

Obstetric Difficulty.—In January, 1930, in connection with the Council's scheme for maternity and child welfare under the Maternity and Child Welfare Act, 1918, the provision of a consultant service was extended to allow medical practitioners to call in a consultant in the event of obstetric difficulty arising during the ante-natal period, labour, or the puerperium. The fee is fixed at £5 5s. inclusive.

	1934	1935
The number of such fees paid was	15	21

Consultants must, in every case, be selected from a list of approved practitioners engaged solely in gynæcological and obstetric practice in the City of Manchester.

Payments made under the above Acts for the period January 1st to December 31st, 1935, were as follows :—

Midwives Act, 1918.

	£	s.	d.
Paid to doctors	1,884	1	6
Recovered from the patients	485	1	4

Puerperal Fever Regulations, 1926.

Paid to consultants	25	4	0
Recovered from the patients	—		

Maternity and Child Welfare Act, 1918 (Difficult Labour).

Paid to consultants	99	15	0
Recovered from the patients	3	18	0
Total paid	2,009	0	6
Recovered	488	19	4

The average nett cost to the Council per case for medical assistance in cases booked by midwives is 8s. 1d.

B. *Domiciliary Nursing Visits to Mothers and Babies.*

The mothers and babies who are nursed or helped by the 4 trained nurse-midwives on the staff of the Department are referred to them from the following sources :—

- (a) Midwives.
- (b) Registered medical practitioners, under the Puerperal Fever, Puerperal Pyrexia, and Pemphigus Neonatorum Regulations.
- (c) Health visitors.
- (d) Maternity and child welfare clinics.

(a) *Midwives.*—Midwives cases may be—

- (i.) Normal puerperal cases with some septic condition.
- (ii.) Normal puerperal cases when the patient is in contact with an infectious disease, such as measles, and isolation cannot be obtained.
- (iii.) Abnormal puerperal cases, in which either mother or baby has some condition diagnosed as septic, or thought likely to be so.
- (iv.) Cases in which there is some unsatisfactory condition of mother or baby at the end of the ten-day lying-in period which requires further nursing, *e.g.*, inflamed veins, premature baby.

(b) *Cases from Doctors.*—An offer of skilled nursing is made to every practitioner who notifies a case under the Puerperal Fever, Pyrexia, or Pemphigus Neonatorum Regulations. The nurse then works under the direction of the patient's own doctor.

(c) *Health Visitors' Cases*.—The nurse visits because the health visitor reports some abnormal condition of mother or baby, such as cracked nipples, prematurity, or insufficient breast milk.

(d) *Maternity and Child Welfare Clinics*.—The doctor at the clinic asks to have a baby treated for some condition, such as an unhealed umbilicus. A large number of cases for re-establishment of breast feeding come from the clinics.

The visits paid by the nurses under the above headings in 1934 were as follows :—

	Number of Visits
Puerperal Fever, Puerperal Pyrexia, Raised Temperature ..	847
Mammary Abscess and Mastitis	581
Phlebitis	94
Cases of infection in the house	58
Mother still unsatisfactory at end of lying-in period	16
Pemphigus Neonatorum and other skin conditions	1,092
Septic and unsatisfactory umbilicus	2,166
Spina Bifida	48
Prematurity of Infant	1,064
Promotion and re-establishment of breast-feeding	342
Unsatisfactory infants	70
	<hr/>
	<u>6,378</u>

Artificial Feeding.—On October 1st the revised rules of the Central Midwives Board in connection with artificial feeding came into force, Rule E 27 (b).

This rule now requires that all cases in institutions where it is proposed to substitute artificial feeding for breast feeding must be notified to the local authority. Prior to this revision, the rule only applied to practising midwives.

During the year 150 notifications of recourse to artificial feeding were received. 85 from midwives and (from 1st October) 65 were received from institutions.

In 65 cases the reason given was scanty secretion of milk, but in some of these it was supplementary rather than a complete change-over.

In 26 of the cases it was resorted to by the doctor's orders, chiefly on account of the mother's health. In two cases on account of cleft palate, and in three cases the babies were being adopted.

Re-establishment of Breast Feeding.—All cases where artificial feeding has been resorted to, are visited by the health visitor; if it is thought there is any chance of promoting, or re-establishing, breast feeding, they are referred to the special maternity nurse.

Of the 26 cases taken by the nurses, 9 were successful and 2 partly successful.

Weakly and Premature Infants.—1,065 visits were paid by the special nurses to weakly and premature babies.

60 babies were attended, including 6 sets of twins and 1 twin (the other stillborn).

The babies were visited regularly by the health visitor when the special nurse ceased attending, and the results when last seen by the health visitor were as follows:—

Doing well	..	38—18	were completely	and	20	partly breast-fed.
Fairly well	..	7—3	were	„	4	„ „
Removed	..	2—2	were	„	—	„ „
Died	.. ..	13—6	were	„	7	„ „

The weight of 11 babies who are doing well were at birth under 4 lbs., one weighing 2 lbs. 10 ozs., two 3 lbs., and four others were under 3½ lbs.

c. *The Investigation of Cases of—*

- (i.) Maternal death.
- (ii.) Puerperal Fever and Pyrexia.
- (iii.) Pemphigus Neonatorum.

Maternal Deaths.

43 deaths from child-birth occurred amongst Manchester mothers, and were investigated in accordance with the request of the Ministry of Health.

There is a reduction from last year in the total number of deaths, and as the figures show, a consequent lowering of the maternal death-rate, 3.64 per cent. against 4.25 per cent. for 1934. This reduction is due to the fall in the number of deaths from causes other than puerperal fever. It is unsatisfactory to have to record an actual rise in the number of deaths from puerperal fever. The cause of this is difficult to locate. The increase occurs in both domiciliary and institution cases, and in 60 per cent. of the cases, the family circumstances were reported to be comfortable,

The following table gives the classification of all the deaths ; the last column gives the 1934 rate for comparison.

TABLE V.
CAUSES OF DEATH IN CHILD-BIRTH DURING 1935.

Cause	Normal Full-term Labour	Abnormal Full-term Labour	Abortion	Total	Rate per 1,000 Registered Live and Still Births
*Puerperal Fever	7	10	7	24	2.03
Other causes	14 (2 undelivered)		5	19	1.61
				43	3.64

* 3 of these cases were not notified as puerperal fever. 2 died before notification and 1 died in a general hospital.

The next table shows incidence of puerperal fever and the percentage of deaths.

	Puerperal Fever Incidence and Case Mortality	
	Cases of Puerperal Fever per 1,000 Notified Births	Mortality per cent. of Notified Puerperal Fever Cases
1932	7.32	17.7
1933	10.29	16.16
1934	10.18	9.76
1935	9.20	20.16

TABLE VI.

ATTENDANT AT CONFINEMENT WHEN MOTHER SUBSEQUENTLY DIED AND THE MORTALITY RATE PER 1,000 CASES
IN DOMICILIARY PRACTICE.

	MIDWIVES' CASES			DOCTORS' CASES				Institutions	Hospital extern. District	No attendant at Confinement	EARLY PREGNANCY	
	Midwife only	Doctor present, called in by Midwife according to C.M.B. Rules	Death Rate, per 1,000 cases taken	Doctor with Midwife as Maternity Nurse	Death Rate per 1,000 cases taken	Doctor only. No skilled nursing	Death Rate per 1,000 cases taken				Abortions	Undelivered
Puerperal Fever ..	4	3	1.55	3 (1 delivered in hospital)	3.73	1	9.09	6 1 delivered (O.D.)	..	..	7	..
Other Causes ..	(2 admitted to Hospital for delivery) 4		.89	..	..	..	..	10 2 died undelivered	..	1	4	..
Total ..	11		2.44	3	3.73	1	9.09	16	..	1	11	..

For number of cases taken, see page 269 of the Report.

Analysis of 19 deaths due to other causes than puerperal sepsis :—

Cardiac conditions with	{	Hyperemesis	I
		Anæmia	I
		Toxæmia of pregnancy	I
		Placenta prævia	2
		Delayed labour	I
Operation for secondary abdominal pregnancy		I	
Ruptured ectopic		I	
Toxæmia of pregnancy followed by Cæsarean section ..		I	
Uræmia and pyelonephritis		I	
Post-partum hæmorrhage after abortion		4	
Post-partum hæmorrhage due to lack of attention at birth			
Post-partum hæmorrhage with retained placenta ..			
Obstetric shock		I	
Massive collapse of lung after forceps delivery		I	
Pulmonary embolism		2	
Post-operative debility after Cæsarean section		I	
<hr/>			
19			

It is satisfactory to record a decrease in the deaths from abortion.

The following table gives the figures for the last five years :—

Year	No. of Deaths	Percentage of Maternal Deaths
1931	9	15·2
1932	11	21·1
1933	21	29·5
1934	18	30·5
1935	11	25·5

In addition to the deaths in the foregoing tables, there were 15 deaths where child-birth was not the primary cause of death, and 33 deaths, including 9 from puerperal fever, where the home address was outside the City.

Puerperal Fever and Puerperal Pyrexia.

Every case of puerperal fever and of puerperal pyrexia notified under the appropriate regulations is investigated at the patient's home address and by interviewing the attendants at the labour if thought desirable.

123 cases of puerperal fever and 122 cases of puerperal pyrexia were notified.

The diagnosis in some of these cases was afterwards modified. The changes in diagnosis from puerperal fever to other causes were :—

Carneous mole	I
Acute confusional insanity	I
Retained placenta	I
Lobar pneumonia and empyema	I
Threatened abortion	I
Simple abortion	8
Incomplete abortion	11
Metrorrhagia	3
Mastitis	I

The changes in diagnosis from puerperal pyrexia were as follows :—

Simple abortion	I
Incomplete abortion	2
Hæmorrhage following miscarriage	I
Subinvolution of uterus and ovarian cyst	I
Normal parturition	I
Influenza	I
Rubella	I
	<u>8</u>

leaving a total of 119 puerperal fever, and 81 puerperal pyrexia. Table VII. shows the distribution of the cases.

TABLE VII.

ANALYSIS OF CASES OF PUERPERAL FEVER AND PUERPERAL PYREXIA.

	Number of Cases	Abortion or Premature Labour	Deaths from Abortion	Full-term Labour	Deaths at Full Term
Puerperal Fever		At 2-3 months .. 19	3	Normal labour .. 40	7
		„ 4 months .. 12	1	Abnormal labour . 36	8
		„ 5 „ .. 6	1		
		„ 6 „ .. 1	1		
		„ 7 „ .. 1	—		
		No information .. 4	—		
	119	<u>43</u>	6	<u>76</u>	15

The number includes 1 abortion and 6 full-term labours, delivered in Manchester Hospitals, but brought in from outside—1 died.

Puerperal Pyrexia		At 3 months .. 8	1	Normal labour .. 41	2
		„ 4 „ .. 3	—	Abnormal labour.. 26	3
		„ 5 „ .. 1	—		
		„ 6 „ .. 1	—		
		„ 7 „ .. 1	—		
		No information .. —	—		
	81	<u>14</u>	1	<u>67</u>	5

The number includes 1 abortion and 9 full-term cases brought in from outside districts and delivered in Manchester Hospitals.

The attendant at the confinement and the subsequent nursing care of the cases is given in Tables VIII. and IX.

TABLE VIII.—ANALYSIS OF CASES OF PUERPERAL FEVER AND PUERPERAL PYREXIA.

	MIDWIFE				DOCTOR, Midwife acting as Maternity Nurse			DOCTOR, No Skilled Nursing			INSTITUTION			HOSPITAL, External District		
	Midwife alone		Doctor present, called in according to C.M.B. Rules		Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths
	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks												
PUERPERAL FEVER, 123 Cases	25	6·83	5	7 (1 de- livered in Hosp'l)	8·39	1	3	4	36·36	1	31 (5 from outside areas)	4·65	5 1 o/d.	..	..	..
Labour and pre- mature labour 76	..	..	..	..	..	1	..	41 (23 sent direct to Monsall, 18 via other Hosp'ls)	..	5	2	..	1	..	..	..
Abortions 43	The attack rate in all cases Mid wives was 7·12 per 1,000 cases taken	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
PUERPERAL PYREXIA, 74 Cases	11	3·0	1	15	17·98	1	..	7	8·71	..	30 (8 from outside area)	4·50	3	3	3·51	..
Labour and pre- mature labour 67	..	..	..	..	..	..	..	9 (5 sent direct to Monsall, 4 via other Hosp'ls)	..	1	5	..	..	1	..	..
Abortions 14	The attack rate in all cases Mid wives was 5·78 per 1,000 cases taken	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

NOTES :—For number of cases taken, see page 259.
For the mortality rates, see Table V.
No attack rate is calculated for cases taken on a hospital district, as cases are also taken outside the Manchester area.
Attack rates are not worked out for abortions, as the number of cases of abortions is not known.

TABLE IX.

	Nursed in Monsall	Died	Per- centage deaths	Nursed in other hospitals	Died	Per- centage deaths	Nursed at home	Died
Puerperal Fever ..	102	14	13·4	15	7	46·6	2	0
Puerperal Pyrexia.	31	1	3·2	37	5	13·5	13	0

The causes of death in cases notified as puerperal pyrexia were :—

At Monsall Hospital—

1 (a) Post-partum hæmorrhage.

(b) Pulmonary tuberculosis.

At other institutions—

(1) (a) Pneumococcal pneumonia, peritonitis, endocarditis.

(2) Lobar pneumonia, mitral stenosis.

(3) Pneumonia and Cæsarean section.

4) Pulmonary tuberculosis, anæmia, and debility following Cæsarean section.

(5) Influenzal pneumonia.

After-Care of Cases of Puerperal Fever and Puerperal Pyrexia.

166 women who have suffered from puerperal fever or pyrexia were visited. 131 were in good health, 16 were under medical care, and 3 were urged to obtain medical advice—15 were pregnant. One had died.

Still-birth and Neo-natal Death in Midwives' Practice.

The following table gives the total number of still-births notified in the City during the year :—

TABLE X.

Number Still-births Notified	Number in Practice of			Per cent. of. Notified Births	
	Midwives, including cases in which a Doctor is called in under C.M.B. Rules	Doctors, including cases with Midwife acting as maternity nurse	Hospitals	1935	1934
664	145 = 2·9% of cases taken	67 = 7·3% of cases taken	*†452 = 6·8% of cases taken	5·14	5·10

* 115 of these cases were mothers whose home address was outside the City.

† 68 cases were admitted as emergency.

Still-births in the Practices of Midwives.

During 1935 there was a slight increase in the number of still-births in the practices of midwives—145 as against 136 in 1934.

It is satisfactory to note a decrease in the number of still-births occurring in primipara, being 22·7 per cent. against 30·8 per cent. in 1934. Of these, 11·9 per cent. were apparently due to breech delivery.

There is a slight increase in the number of still-births occurring in the full-term fresh foetus after difficult and instrumental delivery. These were 7·6 per cent. of all cases of still-birth, against 7·3 per cent. in 1934.

Poor health of the mother is given as a possible cause in 18·6 per cent. of the cases. It is notable that none of these mothers were primipara.

No medical examination of the mother or foetus was made in these cases.

Analysis of Possible Causes.

	Foetus fresh			Foetus macerated		
	Full term	Pre-mature	No. of Primi-paræ	Full term	Pre-mature	No. of Primi-paræ
1. Illness of Mother—						
Influenza .. .. .	..	..	..	..	1	1
Probable specific disease .. ..	..	..	..	1	..	..
Albuminuria	1	..	..	3	1	1
Probable toxæmia .. .. .	..	1	..	..	1	..
Poor health	5	9	..	7	6	..
Falls	1	..	..	..	6	3
2. Ante-partum hæmorrhage	4	6	1	..	..	..
3. Hydramnios .. .. .	..	..	..	1	1	..
4. Accidents of labour—						
Instrumental delivery	3	..	1	..	..	..
Breech delivery	16	2	4	..	..	..
Long or difficult labour	8	1	5	..	..	..
Twin births	3	..	..	..	..	..
Abnormal cords	6	2	1	1	1	1
Post-mature .. .. .	..	..	..	..	..	..
5. Congenital malformations	5	2	1	1	2	1
6. Shock	2	1	2	3	4	3
7. No sufficient reason shown	10	2	5	8	4	2
Want of attention B.B.A.	1	..	1	..	..	..
8. ? Drugs .. .. .	..	..	..	1	..	..
No information .. .. .	..	..	..	..	1	..
	65	26	21	26	28	12

Neo-natal Deaths in Midwives Practice.

There were 94 deaths. Eight of these occurred before a medical practitioner could be obtained.

	Number of cases
Inquest verdicts—	
Asphyxia due to lack of attention at birth (B.B.A.) ..	2
Accidental death—asphyxia probably due to overlaying ..	1
Certificate given by doctor	2
Post-mortem without inquest :—	
Prematurity	2
Congenital heart disease	1

TABLE XI.
PEMPHIGUS NEONATORUM.

Pemphigoid skin rashes reported	Notified Cases	Not Notified	Total Deaths	Death per cent. of all reported cases
55	25 (4 died)	30 (2 died)	6	10·9

Incidence of fatal cases per registered live birth :—

1930	.. ..	0·29 per 1,000.
1931	.. ..	0·57 „
1932	.. ..	0·25 „
1933	.. ..	0·16 „
1934	.. ..	0·17 „
1935	.. ..	0·50 „

TABLE XII.
AGE AT ONSET.

	Under 2 weeks	2-3 weeks	3-4 weeks	Over 4 weeks
Notified cases ..	10	13	2	..
Not notified ..	4	10	9	7

TABLE XIII.

PEMPHIGOID RASHES IN DOMICILIARY AND HOSPITAL PRACTICE.

	Midwives		Doctors		Hospitals and Registered Maternity Homes		Hospital Districts	
	Attack	Death	Attack	Death	Attack	Death	Attack	Death
Notified cases ..	10	1	..	1	7	1	8	2
Not notified ..	14	..	2	..	11	..	3	..

Of the 55 cases, 51 were nursed by the special nurses.

40 cases were of a mild type and the skin condition became normal in from 2 to 3 weeks. In 7 of these a slight condition of conjunctivitis was present.

Of the more serious cases—

6 recovered in 3 to 4 weeks.

1 in 5 weeks.

1 in 6 weeks.

1 removed before recovery.

6 cases died—

Cause (notified cases) —Pemphigus neonatorum	4
(not notified) —Prematurity	1
Gastro-enteritis	1

10 of the above cases were nursed by one midwife and occurred within three consecutive months.

In 6 of the cases the onset was within the first 10 days, and 5 of these were notified as pemphigus neonatorum. One died on the ninth day, a 7½ months' premature baby, weighing only 3½ lbs.

Summary of Investigations (other than nursing visits) made by the
Inspectors of Midwives and Special Maternity Nurses.

	No of Visits
Maternal deaths	59
Puerperal fever	181
Puerperal pyrexia	117
After-care in cases of puerperal fever and puerperal pyrexia.. ..	315
Still-births	5
Investigations into Midwives' compensation claims	18
Investigations into cases of pemphigus neonatorum	2
Medical records and payments of medical fees	16
	<hr/>
	713
Total number of visits made by the staff:—	
Inspectors of Midwives	799
Domiciliary Nursing	6,378
Investigations	713
	<hr/>
	7,890

OPHTHALMIC SECTION.

The work of the ophthalmic section is carried out by 3 fully-trained nurses with special ophthalmic training, under the supervision of the Inspector of Midwives. They visit and treat, under medical supervision, all cases of eye disease from birth to school age, when those who still have eye defects are transferred to the School Medical Officer.

Cases are referred by—

1. Midwives, under the rules of the Central Midwives Board.
2. Medical Practitioners and hospitals, under the Ophthalmia Neonatorum Notification Order.
3. Medical officers at the Child Welfare Clinics.
4. Health visitors.

During the year 1935, 683 new cases were visited. Of these, 386 were cases of eye disease in older children and 297 cases of ophthalmia neonatorum. The total number of visits paid was 7,282.

Ophthalmia Neonatorum.

140 cases were notified by medical practitioner, either private or at the Royal Eye Hospital, as cases of ophthalmia neonatorum. A further 157 cases were reported by midwives who had advised medical aid for unsatisfactory eye conditions not subsequently notified as ophthalmia neonatorum.

TABLE A—1935. OPTHALMIA NEONATORUM AND CONJUNCTIVITIS. HISTORY OF MOTHER.

	Age of Mother						Parity								Labour		Attendant not present at birth	No. of mothers having had previous cases of Ophth. Neon	History of yellow discharge	Legitimacy		
	Under 20	20—25—	25—30—	35 and Over	Not ascertained	Total	1	2	3	4	5	6	7	8	9+	Not ascertained				Normal	Abnormal	
Notified Cases	5	37	37	28	31	2	140	52	28	18	12	12	4	7	2	3	2	135	5	2	133	7
Not Notified (Midwives' cases)	5	37	46	41	19	9	157	48	37	25	14	11	6	—	4	3	9	149	8	7	3	154
Corneal Cases	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	1	—

Total cases notified	140
Total cases not notified	157
	<hr/>
	297
	<hr/>

TABLE B—1935. OPTHALMIA NEONATORUM.

	Interval in days between birth and onset										Attended by				Where treated				Total	No Doctor	
											Midwife	Doctor	Midwife and Doctor	Institution	Home	Out-Patients at Royal Eye Hospital	In-Patients at Royal Eye Hospital	Other Institutions			
	1	2	3	4	5	6	7	8	9	10 +											Total
Notified Cases	9	4	17	4	9	9	15	17	9	47	140	90	3	—	47	91	27	22	—	140	—
Not notified (Midwives' cases)	7	5	11	4	18	8	8	16	21	59	157	129	4	7	17	148	1	—	8	157	—
Total cases notified											140										
Total cases not notified . .											157										

Table B shows the day of onset, the attendant at birth, and the place of treatment. The greatest number of onsets were on the third and eighth days of life, and in over one-half of the cases the first signs of disease appeared after the first five days. 239 cases were treated by private doctors and 50 received treatment at the Royal Eye Hospital.

Swabs were taken from the conjunctiva in all cases where possible, and sent to the Public Health Laboratory to be examined bacteriologically for the presence of gonococcus. 34 swabs were examined, and of these 3 gave a positive result. The mothers were advised to seek medical advice either from their own doctor or from a V.D. clinic.

In cases where swabs have been taken follow-up visits are paid at the end of six months. During the year 12 visits were paid. 4 mothers reported they had had medical treatment, and the discharge had cleared. 1 reported a further pregnancy and 1 had removed from the district. The others were all in good health and stated they had no discharge.

Corneal Cases.

During the year there was one case with involvement of the cornea, the same as last year.

In this case the onset was on the fifth day, and was notified by the doctor. The ophthalmic nurse visited on the sixth day. On the tenth day pustular rash was noticed on the head and eyelids, and on the eleventh day the right cornea was slightly hazy. It was reported to the doctor who arranged for immediate admission to hospital.

Infant discharged three weeks later with a small central nebula. The ophthalmic nurse continued to visit, and at her visit, January 16th, 1936, reported the nebula had cleared.

TABLE C.—RESULTS OF THE 140 CASES OF OPHTHALMIA NEONATORUM AND OF THE 157 OF CONJUNCTIVITIS IN NEWLY-BORN INFANTS.

	Complete recovery	One Eye blind, other normal	One Eye blind, the other damaged	Both Eyes lost	Both Eyes damaged	One Eye damaged	Death before recovery	Removed before recovery
Ophthalmia	115	..	..	..	..	*1 (nebula which will clear)	5	5
Neonatorum								
Conjunctivitis	138	..	..	..	..	..	4	7

Of the notified cases 87 cleared under one month and 30 cleared under two months.
15 cases of ophthalmia neonatorum and 8 cases of conjunctivitis were carried over to 1936.
* Included in the 15 cases of ophthalmia neonatorum carried over to 1936.

TABLE D.—TOTAL NUMBER OF CASES OF OPHTHALMIA AND CONJUNCTIVITIS IN NEWLY-BORN INFANTS AND THE PERCENTAGE WITH CORNEAL COMPLICATIONS, 1911-1935.

Year	No. of Cases	Percentage with Corneal complications
1911	525	7·23
1912	667	11·39
1913	573	12·04
1914	681	9·25
1915	642	7·79
1916	620	6·13
1917	539	6·86
1918	567	8·64
1919	698	4·73
1920	974	4·83
*1921	921	2·28
1922	604	2·3
†1923	569	1·7
1924	572	2·0
1925	533	1·3
1926	478	2·7
1927	444	2·7
1928	375	1·0
1929	334	1·7
1930	321	1·8
1931	255	1·1
1932	225	1·8
1933	250	1·6
1934	273	·36
1935	297	·33

* 1 per cent. silver nitrate supplied to midwives from July, 1921.

† 7 per cent. Argyrol supplied to midwives to replace silver nitrate from March, 1923.

Eye Diseases in Older Children.

In addition to the cases of ophthalmia neonatorum and conjunctivitis in newly-born infants, the ophthalmic nurses visit and treat, under medical supervision, all cases of eye disease in children brought to their notice, until they have recovered, or, in cases of corneal and congenital defects, keep them under observation until they have reached school age, when they are referred to the School Medical Officer with a report on their condition. Seven children were so referred during the year.

During 1935, the staff has visited 386 new cases, and 122 cases carried over from 1934 ; a total of 408 cases.

	Old Cases Brought forward	New Cases	Carried over
Simple Conjunctivitis	29	217	20
Purulent Conjunctivitis	2	22	1
Lacrymal Obstruction	15	86	12
Dacryocystitis	—	4	1
Blepharitis	1	12	3
Corneal Ulcers	4	2	6
Nebulæ cornea	24	13	24
Coloboma	4	1	4
Congenital Cataract	25	9	21
Glioma	—	1	1
Defective Vision	3	1	1
Microphthalmus (one eye)	2	—	2
Iritis	—	1	1
Rinitis	1	—	—
Staphyloma	1	—	1
Nystagmus	1	1	1
Corneal scar (traumatic)	1	1	2
Keratitis	1	—	1
Congenital anophthalmos	3	3	4
Hordeolum	—	7	1
Phlyctenula	1	2	2
Albino	—	1	1
Prophosis	1	—	—
Leucoma	2	1	3
Blind	—	—	—
Buphthalmos	1	1	1
	122	386	114

114 cases have been carried over into 1936.

As will be seen from the following table, there has been a slight increase in the eye conditions associated with malnutrition. These cases, which are widely distributed, are all making satisfactory progress, and during the year no loss of sight has resulted.

The following table gives the figures for the last 10 years :—

Year	Blepharitis	Corneal Opacity (found as Ulcer or Neblua)
1926	46	64
1927	36	36
1928	11	22
1929	18	22
1930	9	16
1931	8	15
1932	6	18
1933	5	9
1934	7	8
1935	12	15

One child, aged 3 years, with a relapsing corneal ulcer, was admitted to the convalescent home at West Kirby, and is reported to be making good progress. The other case of corneal ulcer occurred in a child of $2\frac{1}{2}$ years. Both eyes were affected. His general condition is improving, after a course of sunlight treatment. He has now faint bebulæ, which are fading.

Some of the cases referred as nebula have cleared. The others are clearing, and no permanent damage will result.

In only one case was the cornea affected after measles. The child, aged 2 years, has now a small central nebula.

All cases of corneal infection are visited regularly, to see that no relapse has occurred, and that the home care is satisfactory.

The cases of blepharitis were all very slight.

The case of glioma occurred in a child of 16 months. Radium treatment was given, but it was decided to enucleate the eye 7 months later. The other eye is normal, and the child is being kept under observation by both the Christie and the Royal Eye Hospitals.

Sunshine Home for Blind Babies.

During the year 1 child was maintained in the Sunshine Home for Blind Babies, Southport, suffering from congenital microphthalmos and anophthalmos.

CHILD WELFARE CENTRES.

In September the Northenden Centre was opened, and at the end of 1935 there were, therefore, 21 municipal infant welfare centres and one voluntary centre in the Holy Name Schoolroom, to which the City supplies the medical officer and the stationery. This centre is otherwise staffed by the Sisters of Charity of the Order of St. Vincent de Paul.

There are at the various centres 104 weekly medical consultations, comprising 71 infant sessions, 4 special birthday sessions, 6 sunlight, 19 ante-natal, and 4 toddlers' sessions, at which an attempt is made to secure only the attendance of children between 2 and 5 years of age.

At the end of the year there were :—

5,213 children under 1 year on the centre register.

3,963 children between 1 and 2 years on the centre register.

5,789 children between 2 and 5 years on the centre register.

63.5 per cent. of all Manchester children under 1 year attended at least once.

The tables show the work done at the Child Welfare Centres during the year 1935.

217,833 attendances were made at these sessions :—

111,119 by children under 1 year.

49,965 ,, between 1 and 2 years.

31,251 ,, ,, 2 and 3 ,,

17,565 ,, ,, 3 and 4 ,,

7,933 ,, ,, 4 and 5 ,,

Toddlers' Sessions.

A weekly examination session is set apart for children between 2 and 5 years of age at Newton Heath, Collyhurst, Ancoats, and Openshaw Centres. To the parents in these wards, as their children reach 2 and 3 years of age, a card of invitation is delivered personally by the Health Visitor, who emphasises the need for continued medical supervision, and urges them—if they are unable to obtain it otherwise—to bring their children for examination.

During 1935, 1,949 invitations were sent to 2 year olds, of whom 439 were brought for examination, and 2,118 were sent to 3 year olds, of whom 364 were brought for examination.

Massage and Remedial Exercises.

This work is performed by a staff of 8 full-time masseuses, and, in addition, part-time masseuses for 17 sessions weekly.

Massage treatment is provided at 19 centres, where 50 weekly sessions were held. At 8 centres a weekly class of remedial exercises is held for children from 2 to 5 years, for whom exercises are considered better than massage. The ailments treated are postural defects, rickety deformities, general or local poor muscular tone, and some of the milder birth injuries.

There were 28,386 attendances for massage and 4,249 for remedial exercises.

Artificial Sunlight.

Lamps for treatment by ultra-violet light are installed at four of the centres, and cases for treatment are referred to one of these from the other clinics. 1,099 patients were treated during 1935 and 22,928 irradiations were given. 114 of the cases were adults and 985 children, 83 of whom were under 1 year.

386 children and 47 adults ceased attending before the conclusion of their course of treatment. As only general treatments can be given by the type of lamps in use only children, with the exception of one class, suffering from conditions likely to benefit by this mode of treatment are admitted to the clinic, and the results do not vary much from year to year.

The exception mentioned above is that of children under 1 year to whom (as many as possible) a course of prophylactic treatment is given. Only 83 were treated in 1935, as urgent cases have prior claim on the clinic.

Rickets, malnutrition, and debility were again the conditions for which the greatest number of cases were treated. Observation showed that, apart from the healing of rickets, there was decided improvement in appetite—increase in muscle tone and in mental and physical activity.

Other cases treated were suffering from adenitis, asthma, nervous debility, bronchitis, and catarrh. The treatment was found to be particularly beneficial in cases of recurrent bronchitis and catarrh, and in the convalescence of children who had had an attack of whooping cough or measles. These patients responded at once in a striking manner to a short course of treatment.

The adults treated were expectant and nursing mothers. The depression, nausea, and vomiting which occur so frequently in the early stages of pregnancy disappeared after a very few treatments.

All cases that have been discharged on completion of their course of treatment are followed up during the year. 21 of these were recommended for a second course—the condition of the remainder being satisfactory.

Dental Clinics.

Dental clinics are held at two of the Child Welfare Centres, and at each clinic two sessions are held weekly—one for mothers and one for children.

A general routine inspection for children has not yet been arranged. Children with suspected or beginning dental caries are referred from the welfare centres to the dental clinic, where preliminary dental treatment is given. The parents then receive regular three- or six-monthly invitations to bring them for further inspection and treatment until they reach the age of 5 years. The welfare centres are notified when these appointments are not kept.

At the beginning of the year there were 466 children under 5 in attendance at the dental clinics. 761 new cases were referred for treatment from the welfare centres. 167 failed to attend. 594 new children attended for treatment. 378 were marked off on reaching 5 years of age and 267 because they ceased to attend. 415 names remained on the register at the end of the year. 1,579 attendances were made.

The response to the offer of dental treatment varies in different centres:—

Centre	Number referred	Number failed to attend	Number attended
Abbey Hey	6	1	5
Ancoats	48	7	41
Ardwick	64	13	51
Blackley	28	10	18
Chorlton-upon-Medlock	52	8	44
Collyhurst	63	20	43
Cheetham	40	5	35
Clayton	20	7	13
Chorlton-cum-Hardy	40	6	34
Didsbury	11	—	11
Gorton	40	5	35
Harpurhey	32	9	23
Hulme	42	11	31
Levenshulme	27	4	23
Miles Platting	12	1	11
Newton Heath	65	17	48
Northenden	7	3	4
Openshaw	53	17	36
Rusholme	59	13	46
Withington	45	8	37
Hart Road	6	1	5
Holy Name	1	1	—
Totals	761	167	594

A session for dental treatment of nursing and expectant mothers and one for children has been held weekly at Rosamond Street and Cheetham Centres. Patients are referred from the welfare centres.

During 1935, 537 mothers made 1,415 attendances. 210 others failed to keep any appointment and received no treatment. The condition of the mouths is such that usually only extractions can be done.

Systematic talks on the influence of diet on dental structure and the prevention of caries are given at all the centres and at the dental clinics.

Cookery Classes.

It is recognised that one of the causes of the ill-health of the child under 5 years is an unsuitable diet, and it was considered advisable to provide, at infant welfare centres, classes where mothers could be taught the values of food and its preparation while young children were "minded" at the centres. For attendances, see page 310B.

The classes at Collyhurst, Rosamond Street, and Withington have been very well attended. West Gorton and Ardwick have improved. Newton Heath and Hulme remain about the same, but the attendances at Clayton and Ancoats have fallen off. At Ancoats, where it is unlikely—owing to slum clearance—that the attendances will improve, one of the two cookery sessions was transferred, in April, to Openshaw.

A class was begun at Northenden in November, which has been much appreciated.

An elementary knowledge of dietetics is taught, and the mothers appreciate the importance of well-planned and properly cooked meals.

Voluntary Workers.

During the year 290 voluntary workers gave valuable assistance at the child welfare centres. The total number of attendances of these workers for the year was 10,541, an average of 2·8 workers per session.

The department is greatly indebted to the voluntary workers supplied by the Schools for Mothers for the cordial co-operation they give in the work of the centres by entering the new babies, registering the attendances, and charting the heights and weights of the children.

At Ancoats and Rosamond Street the Schools for Mothers held sewing classes during the winter, and 771 attendances were made.

It is difficult to give an adequate conception of the great amount of devoted work carried out in the centres by the School for Mothers, but we gratefully acknowledge the very large and important contribution made by this Society to the work of maternity and child welfare in the City.

Ante-natal Clinics.

An ante-natal session was begun at Northenden in October, and there are now ante-natal clinics established at 15 centres, where 19 weekly sessions are held. Bi-weekly sessions are held at Openshaw and Rusholme ; at Higher Ardwick and Hulme they are combined with V.D. treatment for mothers and children. 2,857 new mothers were admitted and 13,017 attendances were made.

In addition to the ante-natal sessions provided at the infant welfare centres, there are municipal ante-natal clinics established at Crumpsall and Withington Hospitals (see pages 165 and 195).

Post-natal Clinics.

The after-effects of childbirth continue to give rise to concern and every attempt was made to secure the attendance of mothers for a post-natal examination at one of the 15 ante-natal centres. 609 presented themselves for complete examination at four to six weeks after confinement. The results were as follows :—

RESULTS OF POST-NATAL EXAMINATIONS.

1. Total number of cases examined	609
2. „ „ recovered	195
3. „ „ not recovered	411
4. „ „ not fully examined	3
5. Number of defects found	868
6. General post-natal conditions :—	
(A) Satisfactory	310
(B) Unsatisfactory	299
(i.) Due to labour—	
(a) Backache	90
(b) Anæmia	87
(c) Any other condition	75
(ii.) Due to old-standing disease	73
7. Local pelvic conditions :—	
(A) Satisfactory	285
(B) Unsatisfactory	321
(C) Not examined	3
(i.) Prolapse	18
(ii.) Retroversion	100
(iii.) Subinvolution	54
(iv.) Cervical tears	85
(v.) Rectocele	37
(vi.) Cystocele	37
(vii.) Leucorrhœa	39
(viii.) Perineal tears	60
(ix.) Any other condition	50

8. Evidence of renal disease :—

(A) A.N. albuminuria	86
(i.) Recovered	62
(ii.) Not recovered	22
(iii.) Not examined	2
(B) Albuminuria P.N. only	12
(C) A.N. Hyperpiesis	65
(i.) Recovered	35
(ii.) Not recovered	20
(iii.) Not examined	10
(D) Hyperpiesis P.N. only	6

Post-natal Exercises.

At Rusholme the post-natal exercises session, begun in July, 1931, was continued, and during the year 279 attendances were made.

The exercises and massage treatment are carried out by one of the Corporation part-time masseuses.

The purpose of this treatment is to restore the mother to a satisfactory state after her pregnancy and confinement. The abdominal wall, pelvic floor, and soft tissues are stimulated and their tone restored by massage and exercises. Backache resulting from spinal and sacroiliac strain is also helped by treatment.

The mothers come about a month after the confinement, and graduated exercises and massage are begun. After a few weeks the mother can do quite a reasonable course of exercises, and her bodily mechanics and general health are improved.

By arrangement with Ancoats Hospital, members of the staff of the Physio-therapy Department have continued to conduct post-natal exercise classes for mothers at the Levenshulme and Withington Centres.

The Superintendent of the Physio-therapy Department of Ancoats Hospital reports :—

Levenshulme Clinic.

The work in the clinic has been highly satisfactory.

Number of cases for the year	65
Number of attendances	344

Of these, 183 were ante-natal and 130 post-natal.

The conditions treated were :—Muscular weakness 20 cases, postural backache from a tilted pelvis 11 cases, intestinal stasis and visceroptosis 8 cases, and other condition, such as separated recti and weakness of pelvic floor.

Withington Clinic.

The work in this clinic has improved, but attendances are still less than they might be. A large room has been provided, and this is very satisfactory.

Cases treated are muscular weakness, separation of recti, obesity, weak musculature of pelvic floor, and prolapse :—

Total attendances	201
Total number of cases	52
New cases	39

Lady Mayoress's Shield.

The Lady Mayoress of Manchester in 1933—Mrs. Davidson Peattie—presented a shield for competition amongst the welfare centres, to be held for a year by the centre judged to have done the best work.

The Committee decided to institute an annual series of competitions, covering the whole of the activities of the centres, and to award the shield to the centre that obtained the highest number of marks.

The marks were awarded for attendances at the centres, for breast-feeding, for immunisations, for *viva-voce* examination in mothercraft, for garments (both new, and made from old garments), for dinner menus, stews, bread, toys, household gadgets, etc.

In the 1934 year's competitions, Withington Centre obtained the highest marks. This centre therefore holds the shield for 1935.

Immunisation against Diphtheria.

At the infant welfare centres immunisation is carried out by the centre doctors, and periodic campaigns are held to stimulate the interest of parents. Now that the school children are immunised at the schools the demand at the infant welfare centres is less, since the school children are not brought there and the younger children are frequently taken with the older ones to be immunised at the schools. (See page 38.)

AILING CHILDREN.

Hospital Treatment and Follow-up Work.

Twenty beds for children under 1 year and 10 for children between 1 and 2 years are retained at the Manchester Babies' Hospital (see page 323) and 8 beds in the Babies' Ward at Monsall Hospital (see page 183).

350 beds for children under 5 years are provided at the Booth Hall Hospital.

For some years now the names of children under 2 years of age who have been patients in Booth Hall Hospital have been notified to the Maternity and Child Welfare Department on discharge, and the cases have been visited immediately and followed up by the health visitors. When the transfer of this hospital to the Public Health authority took place in 1930 the lists were extended to include all discharged cases under 5 years of age, and, in addition, brief clinical notes on each case have been given, and further clinical notes have been sent to this department with reference to children under 5 years who have died in the hospital. These notes are of great assistance to the health visitors and are attached to the child's case sheet as part of the record of its first 5 years. When any of these children are attending an infant welfare centre, copies of the clinical notes are sent to the medical officer of the centre and are attached to the child's centre record.

REMEDIAL DAY NURSERIES.

Two such nurseries are maintained by the Schools for Mothers, one next door to the Openshaw Centre and one (the Spence Nursery) in the grounds of the University Settlement at Ancoats. The nurseries are maintained for children between 18 months and 5 years suffering from rickets, malnutrition, and debilitated conditions. Cases for these nurseries are recommended by the centre doctors. The children are retained until they are well or reach 5 years of age.

The Corporation retains 5 beds at each of the nurseries.

Openshaw Day Nursery.

January to December, 1935 :—

Total number of places for children under 5 years	13
„ „ „ whole day attendances	2,281
„ „ „ individual children who attended	23
Number of individual children admitted as Corporation cases	13

(The period of stay varied from 1 week to 12 months.)

Spence Day Nursery.

Total number of places for children under 5 years	22
„ „ „ whole day attendances	3,656
„ „ „ individual children who attended	34
Number of individual children admitted as Corporation cases	14

(The period of stay varied from 8 days to 12 months.)

EXPECTANT MOTHERS' REPORT, 1935.

CENTRES	No. on Register Jan. 1st, 1935	No. of New Cases	Transferred from another Centre	TOTAL	No. still on Register Jan. 1st, 1936	No. of Term Births	Still-births included in Term Births	No. of Premature Births	Still-births included in Premature Births	No. of Mothers left District before Confinement	Transferred to another Centre	No. of Mothers not Pregnant	TOTALS
Ancoats	31	152	2	185	32	135	3	10	5	3	4	1	185
Ardwick	52	234	1	287	53	185	1	12	3	11	2	24	287
Chorlton-upon-Medlock ..	59	227	3	289	68	170	5	19	1	9	1	22	289
Collyhurst	34	148	—	182	34	128	4	5	3	6	1	8	182
Cheetham	37	183	1	221	42	152	5	2	2	10	—	15	221
Clayton	28	163	4	195	60	113	3	13	3	3	—	6	195
Gorton	53	267	1	321	79	195	7	16	8	15	3	13	321
Harpurhey	56	222	—	278	64	181	8	17	5	3	—	13	278
Hulme	18	96	1	115	29	59	1	13	3	3	—	11	115
Levenshulme	55	172	1	228	48	152	4	6	2	7	—	15	228
Newton Heath	50	192	1	243	45	174	6	6	1	8	2	8	243
Openshaw	47	313	3	363	82	224	5	38	8	2	1	16	363
Rusholme	70	219	2	291	59	157	4	10	5	36	3	26	291
Withington	61	229	—	290	72	181	4	14	3	9	7	7	290
Northenden	—	40	4	44	34	9	—	1	—	—	—	—	44
	651	2,857	24	3,532	801	2,215	60	182	52	125	24	185	3,532

EXPECTANT MOTHERS' REPORT, 1935.

Centre	No. of Normal Births	No. of Abnormal Births	Died	Attended for Post-natal Examination
Ancoats	112	33	1	22
Ardwick	171	26	1	46
Chorlton-upon-Medlock .	155	34	—	71
Collyhurst	108	15	—	9
Cheetham	135	19	—	40
Clayton	118	18	—	6
Gorton	174	37	1	94
Harpurhey	158	40	1	51
Hulme	51	21	—	11
Levenshulme	134	24	—	31
Newton Heath	149	31	—	71
Openshaw	202	60	2	22
Rusholme	131	36	—	54
Withington	156	39	—	81
Northenden	7	3	—	—
Totals	1,961	436	6	609

Causes of Deaths of Mothers attending the Centre Ante-Natal Clinics during the Year 1935.

Post-partum Hæmorrhage	1
Puerperal Septicæmia	4
Pulmonary Tuberculosis	1

Centre	On Register at beginning of 1935			New patients			Transferred from age group	Transferred from other Centres	Transferred to other Centres	Died	Marked off not attending			On Register January 1st, 1936		
	0—1	1—2	2—5	0—1	1—2	2—5					0—1	1—2	2—5	0—1	1—2	2—5
Abbey Hey	110	63	128	186	29	58	250	41	12	2	48	28	80	151	119	147
Ancoats	209	183	318	366	106	262	687	13	21	24	81	143	391	250	169	*330
Ardwick	413	254	397	574	121	187	990	80	54	42	122	272	368	386	317	396
Blackley	184	124	211	254	43	90	519	45	29	12	23	106	182	176	158	215
Cheetham	268	223	266	434	86	125	756	15	25	8	91	189	310	284	220	249
Chorlton	193	131	204	228	43	101	505	44	51	6	44	96	176	160	150	205
Clayton	153	102	198	201	36	73	400	38	9	2	47	93	154	150	116	186
Chorlton-upon-Medlock ..	417	289	436	578	150	224	1,004	31	63	28	115	290	430	408	323	406
Collyhurst	262	211	423	357	80	210	788	4	55	19	93	181	417	220	172	*332
Didsbury	170	116	116	233	47	82	396	49	135	2	47	134	140	124	89	115
Gorton	383	289	433	526	99	213	999	31	60	21	90	261	430	381	264	368
Harpurhey	240	211	265	324	54	122	655	47	33	12	53	147	235	257	184	283
Holy Name	42	36	49	68	12	14	108	3	11	..	12	38	52	47	32	27
Hulme	225	146	187	321	83	130	517	16	30	20	66	155	212	208	179	203
Levenshulme	297	243	367	402	52	113	855	62	37	6	73	165	271	292	242	394
Miles Platting	130	84	121	183	24	31	273	17	7	17	63	101	117	117	65	80
Newton Heath	309	242	488	462	83	244	965	44	26	20	71	197	433	334	253	*450
Openshaw	306	198	449	473	80	215	880	27	41	27	82	188	410	328	222	*383
Rusholme	394	252	407	507	80	115	1,012	87	65	15	123	266	393	356	245	305
Withington	330	273	423	381	66	166	891	61	58	12	70	154	308	289	260	455
Wilbraham	60	50	66	92	16	21	147	10	18	..	14	39	64	68	52	47
Northenden .. .. .	..	..	..	162	51	91	55	279	9	2	..	..	..	227	132	†213
Totals	5,095	3,720	5,952	7,312	1,441	2,887	13,652	1,044	849	297	1,428	3,243	5,573	5,213	3,963	5,789

* Birthday Clinics. † Northenden Centre opened September, 1935.

COMPARATIVE TABLES FOR PREVIOUS TWO YEARS—

1934	4,792	3,950	5,854	7,058	1,327	2,627	13,612	687	623	276	1,310	2,977	5,198	5,095	3,720	5,952
1933	5,282	4,006	6,039	6,859	1,335	2,962	14,830	746	686	337	1,146	3,303	6,058	4,792	3,950	5,854

COMPARISON OF REGISTERED BIRTHS AND NEW CASES
ATTENDING CENTRES DURING 1935.

Ward	Registered Births	New Cases under 1 Year at Centre	Per- centage
All Saints	387	276	71.3
Ardwick	424	271	63.9
Beswick	400	214	53.5
Blackley	266	167	62.7
Bradford	406	304	74.8
Cheetham	287	246	86.3
Chorlton-cum-Hardy	372	293	78.7
Collegiate	264	131	49.6
Collyhurst	384	216	56.2
Crumpsall	239	149	62.3
Didsbury	324	143	44.1
Exchange	1	—	—
Gorton North	263	226	85.9
„ South	376	248	65.9
Harpurhey	324	213	65.7
Levenshulme	237	163	68.7
Longsight	245	135	55.1
Medlock Street	411	299	72.7
Miles Platting	401	230	57.3
Moston	396	235	59.3
Moss Side East	333	236	70.8
„ „ West	251	154	61.3
New Cross	491	315	64.1
Newton Heath	327	179	54.7
Openshaw	295	161	54.5
Oxford	7	1	14.2
Rusholme	224	148	66.0
St. Ann's	—	—	—
St. Clement's	106	75	70.7
St. George's	446	266	59.6
St. John's	67	39	58.2
St. Luke's	466	342	73.3
St. Mark's	320	247	77.1
St. Michael's	331	175	52.8
Withington	519	325	62.6
Wythenshawe	686	346	50.4
Totals	11,276	7,168	63.5

Milk was supplied to necessitous nursing and expectant mothers and to children under 5 years who were attending a centre, and for whom the doctor at the centre certified that milk was necessary on grounds of health. For children over 3 years old a certificate was required, stating the reason for the application.

Both dried and fresh milk were used. The dried milk was bought in bulk from the manufacturers and distributed through the centres. The fresh milk was delivered by the retailers; usually one retailer for each centre. The selection was made from a list of those who had satisfactory pasteurising plant. Only pasteurised milk was ordered.

The milk was granted to applicants, after investigation, either "free" or "assisted" (half-price), according to income.

MATERNITY BEDS.

The maternity service of the municipal hospitals is given in the hospitals report.

The Maternity and Child Welfare Department retains 8 beds—2 in St. Mary's Hospital, for first and abnormal cases, and 2 each in the Manchester and Salford District Nursing Institution's Nursing Home, Denison House; the North Manchester Maternity Home, Harpurhey; and the Crossley Hospital, Ancoats. Applications for these beds are made through the welfare ante-natal clinics.

During the year 1935, 138 applications were received; 26 of these were cancelled, and 1 was not accepted as the applicant was unsuitable. Of the remaining 111 applicants, 83 were confined during the year.

HOME HELPS.

The arrangements for the supply of Home Helps in Manchester are made by the Manchester Home Helps Society.

The Society is subsidised by the Public Health Committee.

During the year 1935, 17 Home Helps attended 127 cases for a total of 274 weeks, this being an average of 2.1 weeks per case.

The amount received in fees was £122 9s. 3d.

The Helps are remunerated at the rate of 30s. per week, plus travelling expenses and insurance. They receive no retaining fee when unemployed.

Twenty-three free Home Helps were granted by the Public Health Committee. These cases extended over a period of 53 weeks. One free Home Help was granted by the Society itself.

The remainder of the cases dealt with by the Society paid the costs of the Home Helps to the extent shown in the following table:—

Cases	No. of Weeks Attended	Rate per Week	Amounts Paid by Patients
		£ s. d.	£ s. d.
1	3	0 1 0	0 3 0
2	4	0 1 3	0 5 0
7	16	0 2 6	2 0 0
2	4	0 3 0	0 12 0
2	4	0 3 6	0 14 0
13	30	0 5 0	7 10 0
3	8½	0 6 0	2 11 0
1	2	0 6 6	0 13 0
2	4	0 7 0	1 8 0
10	21	0 7 6	7 17 6
1	2	0 9 0	18 0 0
14	29	0 10 0	14 10 0
1	1½	0 10 6	0 15 9
2	4	0 12 0	2 8 0
7	14	0 12 6	8 15 0
1	2	0 13 0	1 6 0
1	2	0 14 0	1 8 0
16	35	0 15 0	26 5 0
7	14	1 0 0	14 0 0
1	2	1 5 0	2 10 0
8	17	1 10 0	25 10 0
1	2 days	0 5 0 per day	0 10 0
103	219		£122 9 3

Applications are made either through the Infant Welfare Centres or direct to the Secretary of the Home Helps Society. All applications are investigated by officers of the Maternity and Child Welfare Department. If not suitable for a free Home Help, in accordance with the income scale applicable to grants of milk under the Child Welfare Scheme, the information is passed on to the Secretary of the Society, who assesses payment.

SUMMARY OF WORK OF INVESTIGATORS, 1935.

of visits in connection with Milk Investigations..	..	..	New cases	32	49
			Reinvestigations	17	
Milk investigations at Centres ..	..	..	New cases	3,941	22,927
			Reinvestigations	18,986	
visits <i>re</i> Day Nursery investigations ..	..	..	New cases	7	35
			Reinvestigations	28	
Day Nursery investigations at Centres ..	..	..	New cases	24	54
			Reinvestigations	30	
visits <i>re</i> Medical Fees ..	..	..	New cases	1,930	
visits <i>re</i> Medical fees not paid ..	..	..	Reinvestigations	524	2,471
Medical Fee investigations at Centres ..	..	..	New cases	17	
investigation visits <i>re</i> Home Helps ..	..	..	New cases	38	161
investigation visits at Centres <i>re</i> Home Helps	..	..	New cases	123	
investigation visits <i>re</i> Maternity Beds ..	..	..	New cases	11	
			Reinvestigations	12	143
investigations at Centres <i>re</i> Maternity Beds ..	..	..	New cases	120	
visits in connection with assistance with Midwifery Fee..	..	..	New cases	12	103
investigations at Centres <i>re</i> assistance with Midwifery Fee	..	..	New cases	91	
Total ..					25,943
Office Work: Milk Clerk's duties ..	..	70½	days		
Office Work—Clerical duties ..	..	170	„		
Total ..				240½	„

Mothercraft Exhibition.

The Maternity and Child Welfare Mothercraft Exhibition is now made up of—

1. A Clothing Exhibition, showing model garments for—
 - 1—4 months.
 - 4—12 months.
 - 1—2 years.
 - 2—3 years.
 - 3—5 years.
 - Belts, etc., for mothers.
2. Model diets for—
 - 8—10 months.
 - 10—12 months.
 - 1—2 years.
 - 2—5 years.
 - Expectant and nursing mothers.

Diets of three meals for two complete days are given. The necessary amount of foods to give the correct calories and vitamin contents are first worked out. Foodstuffs in these quantities are then cooked. Models in wax and other substances are then made.

Explanatory posters and cards accompany the models.

3. A small “household gadgets” section.
4. The beginnings of a “safety first” section, made up of model rooms, showing how accidents occur, and how they may be prevented.

The exhibition is divided so that a small part of it is shown each fortnight at a centre, *i.e.*, an age group of clothing is followed by the model diets for an age group. In this way an individual centre is not overcrowded by a large exhibition, and the fortnightly changes receive a steady attention that a permanent exhibition could not have.

Patterns or knitting directions have been made of all the model garments, and have been sold to mothers at a small charge. Crumpsall and Withington Ante-natal Clinics also use the maternity belt, etc., patterns, and the 1—4 months set; and various patterns have been sent by request to other local authorities. In 1935, 4,405 patterns were sold.

The Maternity and Child Welfare Clothing and Diet Exhibition was on view at the Town Hall on January 18th, 1935, at the Annual Meeting of the North-Western Federation for Maternity and Child Welfare; from May 1st—4th at the Royal Infirmary for the Annual Meeting of the College of Nursing; and from May 8th—18th at Stockport Public Health Department for the Jubilee Exhibition.

Wherever the Exhibition has been displayed great enthusiasm has been shown for this method of teaching mothercraft.

INFANT LIFE PROTECTION.

CHILDREN ACTS, 1908—1933.

Children Nursed for Hire or Reward during the Year 1935.

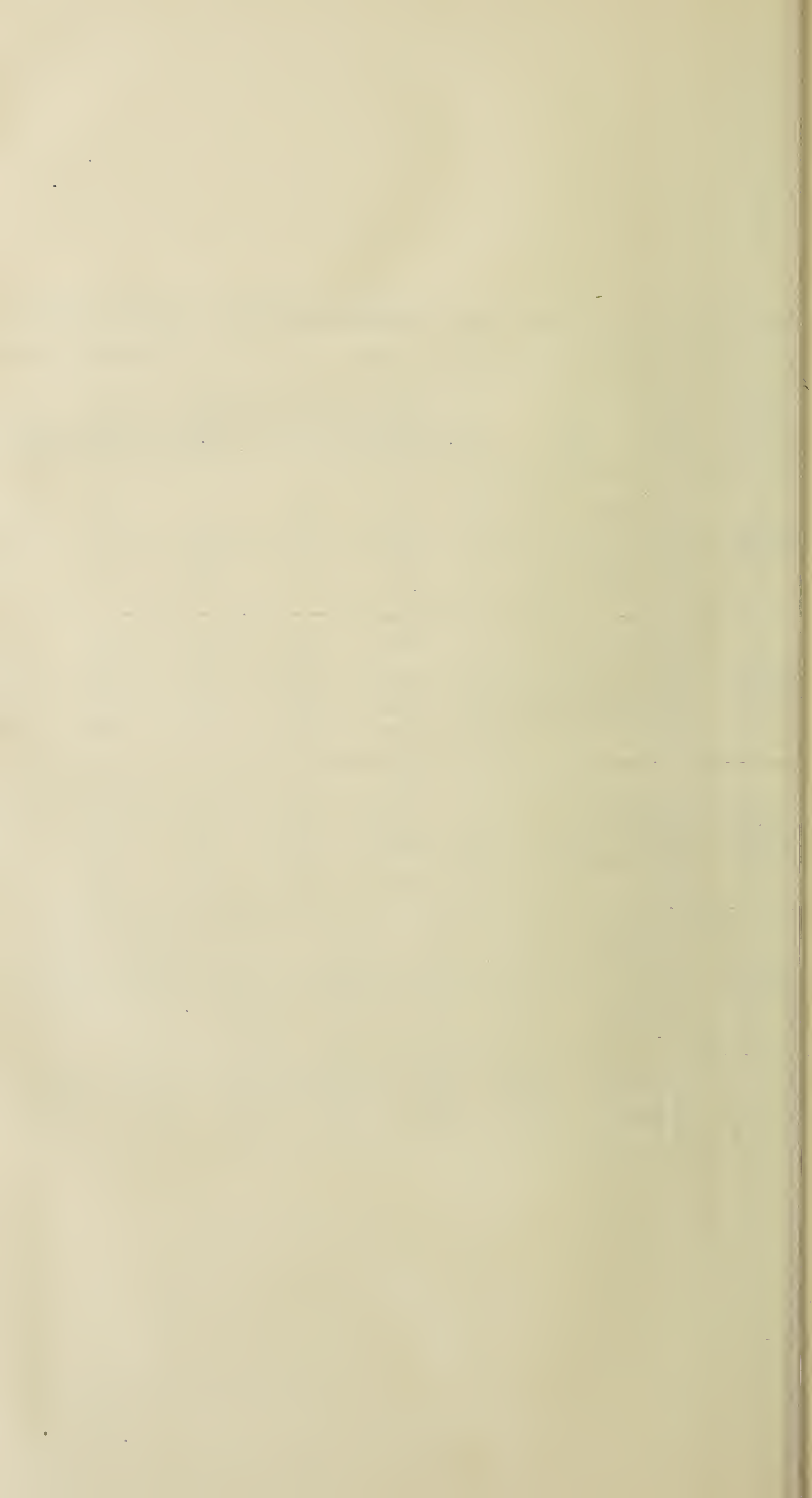
Number of foster-mothers on the register at the beginning of the year	210
„ „ on the register at the end of the year ..	192
Number of children on the register at the beginning of the year	244
„ „ placed on the register during the year	200
	<u>444</u>
„ „ who ceased, during the year, to come under the provisions of this Act	224
„ „ remaining on the books at the end of the year ..	220

Details as to number of children who ceased, during the year, to come under the Provisions of the Children Acts, 1908—1933.

Returned to parents or relatives	128
Attained the age of 9 years.. .. .	15
Adopted without payment	16
Sent to special homes, etc.	12
Admitted to hospitals	27
Removed to other districts	23
Deaths	3
Total	<u>224</u>

PROVISION OF MILK FREE OR AT REDUCED COST DURING THE YEAR 1935, COMPARED WITH THE YEAR 1934.
STATEMENT SHOWING NUMBER OF CASES RECEIVING MILK, AMOUNT SUPPLIED, COST, AND MODE OF DISTRIBUTION.

			70-72, Rosamond St. West, C.-on-M.	1, Manipur St., Openshaw	153, Cheetham Hill Road Cheetham	135, Pollard St., Ancoats	93, Hamilton Street, Collyhurst	230, Hyde Road, West Gorton	42, Lower Moss Lane, Hulme	45, Hilgher Ardwick, Ardwick	Jubilee Schools, Harpurhey	St. George's School, Abbey Hey Lane	686, Oldham Rd., Newton Heath	Elm Street, Miles Platting	St. Peter's School, Levens- hulme	Welsh Church, Moss Lane East, Moss Side	26, Clayton Street, Clayton	U.M. School, Market Street, Blackley	Baptist School, Chorlton- cum-Hardy	25 Heaton Road, Withington	Community Hall Hart Rd., Wilbraham Estate	Liberal Club Barlow Moor Rd., Dudbury	Beetham Northenden	Total
Milk Cases	Fresh Milk	1935.. ..	181	234	124	185	200	169	146	174	71	47	106	66	92	183	71	30	35	75	27	56	21	229
		1934.. ..	150	190	125	160	205	153	135	77	53	42	87	71	100	205	74	22	30	97	14	69	—	209
	Dried Milk	1935.. ..	284	75	108	164	119	144	93	295	92	35	61	47	67	128	53	47	26	34	4	19	41	1,508
		1934.. ..	238	67	54	93	85	113	76	221	74	12	56	54	36	95	31	53	39	34	5	5	—	1,441
Milk Pounds	Fresh Milk	1935.. ..	5,694	5,755	3,351	4,048	5,511	5,398	2,920	4,915	1,994	1,561	4,065	1,428	3,897	6,032	3,256	782	1,170	3,814	639	1,432	384	63,046
		1934.. ..	4,174	6,397	3,328	3,588	7,087	5,282	2,966	4,039	1,500	1,497	3,128	1,857	3,163	6,279	3,476	613	639	3,283	951	1,415	—	64,662
	Dried Milk	1935.. ..	8,079	3,390	3,483	3,167	3,538	4,937	3,182	7,168	2,634	681	2,308	1,542	1,916	3,027	1,752	1,023	946	1,046	111	142	337	54,439
		1934.. ..	7,487	3,474	2,350	2,104	4,132	6,004	3,364	7,500	2,611	221	1,750	1,477	1,629	2,632	1,849	843	1,063	931	62	119	—	51,602
Milk Gallons	Fresh Milk	1935.. ..	40,921	40,910	24,171	28,575	38,816	38,211	20,571	35,073	14,227	11,143	28,630	10,426	27,413	42,651	23,423	5,754	8,238	28,076	4,513	10,032	2,805	434,582
		1934.. ..	29,713	45,281	23,296	25,767	49,692	36,974	20,880	28,434	10,636	10,513	21,896	13,239	22,503	43,976	24,400	4,343	4,473	23,627	6,852	10,117	—	450,812
	Dried Milk	1935.. ..	9,031	4,209	4,016	3,611	4,250	5,798	3,770	8,232	2,945	786	2,725	1,899	2,260	3,563	2,102	1,211	1,069	1,375	137	181	372	61,542
		1934.. ..	8,252	4,227	2,759	2,450	4,610	6,940	3,901	8,577	2,843	264	2,044	1,677	1,891	3,136	2,177	907	1,165	1,169	70	149	—	59,203
Cost pence	Fresh Milk	1935.. ..	£ s. d. 407 0 10	£ s. d. 378 4 6	£ s. d. 251 5 8	£ s. d. 293 15 8	£ s. d. 364 3 4	£ s. d. 350 5 9	£ s. d. 210 3 1	£ s. d. 340 17 6	£ s. d. 127 14 3	£ s. d. 99 14 7	£ s. d. 282 14 3	£ s. d. 98 3 10	£ s. d. 271 10 7	£ s. d. 430 8 4	£ s. d. 236 13 5	£ s. d. 52 15 11	£ s. d. 80 15 10	£ s. d. 285 19 8	£ s. d. 43 14 5	£ s. d. 102 9 0	£ s. d. 32 12 11	£ s. d. 4,741 3 4
		1934.. ..	301 6 4	455 0 3	242 9 11	268 2 11	485 18 1	340 16 4	214 16 0	278 14 11	93 8 5	98 13 3	211 12 2	128 0 11	208 15 4	440 6 9	249 6 5	39 12 10	47 0 10	240 2 4	64 3 8	112 5 10	—	4,520 13 6
	Dried Milk	1935.. ..	394 13 11	158 12 0	179 2 4	136 8 3	154 15 9	228 17 10	155 6 9	344 9 9	112 3 0	30 14 0	101 6 0	64 11 4	93 19 8	157 6 7	84 9 7	51 7 0	43 2 6	54 11 1	6 9 3	7 13 3	17 17 7	2,577 17 5
		1934.. ..	370 5 10	170 3 7	119 19 11	92 0 9	190 6 1	287 11 7	171 19 6	358 2 2	104 16 2	11 18 5	77 2 10	66 17 10	79 17 2	139 6 2	95 6 4	38 4 1	53 9 6	51 3 4	3 17 8	6 19 3	—	2,439 5 2
Total	Fresh and Dried Milk	1935.. ..	801 14 9	536 16 6	430 8 0	430 3 11	518 19 1	579 3 7	365 9 10	685 7 3	239 17 3	130 8 7	384 0 3	162 15 2	365 10 3	587 14 11	321 3 0	104 2 11	124 18 4	340 10 9	50 3 8	110 2 3	50 10 6	7,319 0 9
		1934.. ..	671 12 2	625 3 10	362 9 10	360 3 8	676 4 2	628 7 11	386 15 6	636 17 1	198 4 7	110 11 8	288 15 0	194 18 9	288 12 6	579 12 11	344 12 9	77 16 11	100 10 4	291 5 8	68 1 4	119 5 1	—	7,611 1 8



STATEMENT OF WORK DONE AT THE CHILD WELFARE CENTRES DURING THE YEAR 1935.

	Year	Chorlton-upon-Medlock	Openshaw	Ancoats	Collyhurst	West Gorton	Cheetham	Hulme	Ardwick	Abbey Hey	Newton Heath	Harpurhey	Elm Street	Holy Name	Rusholme	Levenshulme	Clayton	Didsbury	Withington	Chorlton-upon-Medlock	Blackley	Withybraam	A.A. Northenden	Totals
Consultations	1935	6,172	5,977	4,336	4,365	6,491	3,564	3,051	5,898	2,614	5,766	4,984	1,803	709	5,729	4,305	2,734	1,609	4,598	2,558	2,415	943	571	81,192
	1934	6,251	6,018	4,305	5,013	6,152	3,487	3,471	5,327	1,979	4,124	4,167	2,050	623	5,192	4,582	3,105	1,130	4,731	2,007	2,315	852	..	76,881
Babies weighed only ..	1935	11,015	6,414	5,308	7,146	9,745	6,140	5,162	11,238	3,832	8,242	7,057	3,553	952	11,028	10,078	3,713	2,853	11,032	5,092	4,784	1,635	1,572	137,641
	1934	11,256	7,041	5,443	8,040	9,585	6,256	5,101	11,916	2,560	9,293	8,421	2,903	689	12,056	9,676	3,856	2,709	10,320	4,639	4,136	1,724	..	137,611
Total attendances	1935	17,187	12,391	9,644	11,511	16,236	9,704	8,213	17,136	6,446	14,008	12,041	4,356	1,661	16,757	14,383	6,447	4,462	15,630	7,650	7,199	2,623	2,143	218,833
	1934	17,507	13,059	9,743	13,053	15,737	9,743	8,572	17,243	4,539	13,417	12,588	4,953	1,312	17,248	14,258	6,961	3,839	15,051	6,637	6,451	2,575	..	214,492
Individuals who attended Centres	1935	1,639	1,375	1,186	1,191	1,569	1,104	894	1,598	544	1,468	1,051	431	181	1,429	1,267	656	623	1,374	732	770	266	50	21,991
	1934	1,720	1,380	1,045	1,336	1,554	1,042	859	1,212	426	1,417	1,032	505	157	1,501	1,185	634	574	1,347	724	703	254	..	21,007
Number of attendances for Massage	1935	1,651	2,508	1,288	2,431	1,683	1,593	1,464	2,165	1,451	1,985	1,618	977	..	2,188	1,359	1,446	..	1,297	632	530	..	124	21,006
	1934	1,864	2,419	1,972	2,556	1,571	1,838	1,324	2,016	1,241	1,855	1,222	1,030	..	1,811	1,402	1,860	..	1,205	576	618	..	..	21,000
Number of Attendances for Remedial Exercises ..	1935	380	..	..	..	..	321	45 Mothers	..	574 Children	..	..	..	..	1,016 Children	821 Children	348 Children	..	675 Children	..	..	..	114 Children	4,249 Children
	1934	410	..	..	..	..	480	..	..	378 Children	..	..	..	..	279 Mothers	344 Mothers	2 Mothers	..	201 Mothers	..	..	..	..	4,050 Children
Number of Attendances for Sunlight	1935	7,261	..	..	..	..	4,165	..	7,631	..	3,871	..	..	..	..	..	..	..	..	..	..	..	..	22,428
	1934	7,357	..	..	..	..	3,943	..	7,320	..	3,864	..	..	..	..	..	..	..	..	..	..	..	..	22,434
Number of Attendances at Cookery Classes	1935	843	147	576	488	419	..	296	350	..	332	..	..	..	..	..	287	..	568	..	..	..	91	4,207
	1934	699	..	738	212 *	227	..	301	263	..	366	..	..	..	..	..	455	..	67†	..	..	..	..	3,204
Number of Attendances at Ante-natal Clinics.. ..	1935	968 A.N. 144 P.N.	1,315 A.N. 50 P.N.	594 A.N. 26 P.N.	749 A.N. 26 P.N.	1,111 A.N. 134 P.N.	635 A.N. 54 P.N.	509 A.N. 33 P.N.	846 A.N. 58 P.N.	..	1,066 A.N. 101 P.N.	1,077 A.N. 77 P.N.	..	..	1,133 A.N. 102 P.N.	991 A.N. 34 P.N.	606 A.N. 10 P.N.	..	1,279 A.N. 90 P.N.	..	..	..	138 A.N. .. P.N.	13,417 A.N. 900 P.N.
	1934	1,009 A.N. 133 P.N.	1,047 A.N. 34 P.N.	421 A.N. 31 P.N.	641 A.N. 19 P.N.	840 A.N. 48 P.N.	575 A.N. 26 P.N.	409 A.N. 49 P.N.	845 A.N. 76 P.N.	..	8788 A.N. 92 P.N.	847 A.N. 81 P.N.	..	..	1,053 A.N. 132 P.N.	873 A.N. 14 P.N.	758 A.N. 25 P.N.	..	1,044 A.N. 81 P.N.	..	..	..	..	11,240 A.N. 641 P.N.
Number of Attendances at V.D. Clinics	1935 .. .. .	..	..	..	..	..	..	521	1,289	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,412
	1934 .. .. .	..	..	..	..	..	..	463	1,134	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,597
Number of Attendances at Dental Clinics	1935	812 Mothers 979 Children	..	..	..	..	603 Mothers 600 Children	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,415 Mothers 1,579 Children
	1934	890 Mothers 953 Children	..	..	..	..	694 Mothers 740 Children	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,584 Mothers 1,693 Children

* Began June 12th, 1934.

A.A.—Beech House, Northenden, was opened on September 24th, 1935.

† Began November 8th, 1934.

Licences Granted.

Licensed for one child	53
„ „ two children	5
„ „ three children	1
„ „ one child for two months	1
„ „ one child for three months	8
„ „ two children for three months	2
Licence renewed for one child for three months	3
	<hr/> 73
Licences refused	4
Licences withdrawn	1
Cautions	7

Adoptions.

By foster-mothers	7
Other persons	9
	<hr/> 16

The majority of nurse-children are illegitimate. Of the 200 new cases taken on the books in the last 12 months, only 50 were legitimate.

The number of visits paid by the Infant Life Protection Officer to nurse children during the year was 735; visits paid by health visitors in connection with the work was 921.

There have been 3 deaths amongst the nurse-children during the year while actually in charge of foster-mothers. 27 children were admitted to hospitals, 4 of whom died.

One child was deserted by his mother and was admitted to Dr. Rhodes' Home, West Didsbury. The mother of the child has not yet been traced and the child is therefore still in the charge of the City Council.

The majority of foster-mothers in Manchester undertake the care of a child for 12s. 6d. per week; a few charge 15s.; a small proportion 10s.; and a very small number from 2s. to 10s. per week.

The finding of foster-mothers still remains difficult, and it is therefore recorded how homes were found for the 200 new children :—

Introduced by the Infant Life Protection Officer	79
Friends of the parents	35
Acquaintances	32
Children returned to late foster-mothers	22
Unrecorded	13
Born in nursing homes and left there till other arrangements could be made	5
Mother and child previously lived together ; mother on obtaining work left child in care of landlady	3
Distant relatives	3
Introduced through Salvation Army Home, Oakhill	2
Found by a friend	1
Found by advertising.. .. .	1
Introduced by Roman Catholic Sisters	1
Introduced by another foster-mother	1
Born at a midwife's house and left there till other arrangements could be made	1
Foster-mother and foster-child removed to Manchester from an outside area	1
	<hr/>
	200
	<hr/>

Occasionally the landlady of an unmarried mother becomes the foster-mother when the mother of the child has to leave her lodgings on obtaining a situation elsewhere.

A few matrons of nursing homes have become foster-mothers where a child has been born in the nursing home, when the mother has preferred leaving the child there until future arrangements have been made.

The Infant Life Protection Visitor introduced 79 mothers to 79 approved foster-mothers during the year.

Municipal Foster-mothers.

In 1919 the Committee accepted the endowment of the Cheetham Institute, for children deprived of the care of one or both of their parents, and in return undertook to provide foster-mothers for such children.

Since April, 1932, foster-mothers receive 15s. weekly for each child. For this they undertake to clothe, feed, and care for the child. It is also a condition that the foster-children should be taken regularly to infant welfare centres.

At the beginning of the year there were 10 such foster-mothers and 11 foster-children on the register, and at the end of December, 1935, there were 10 foster-mothers and 11 children. During the year 27 children have been helped by the municipal grant; 16 children have been placed on the register during 1935.

The grant has been spent in maintaining children of ill mothers or of widowers and of 11 unmarried mothers, who could not make any suitable arrangement for the care of their child. The period of help given to each child varies, but no child is helped after the age of 5 years. Usually permanent suitable arrangements are made before the child attains the age of 5 years.

Adoptions.

During the year 1935 permanent homes were found for 16 foster-children, 7 of whom were adopted by foster-parents and 9 by other persons. In addition, the Maternity and Child Welfare Department introduced 8 other infants to would-be adopters.

Out of this number 5 have been legally adopted after the adopter has had the child for a trial period, 1 died in hospital, and 2 were returned to the parent; one because the child did not settle and the other because the circumstances altered.

Introductions are not made until the prospective adopters have been interviewed and visited to ascertain their suitability. If the address is out of the Manchester area an opinion is obtained from the Medical Officer of Health of the district concerned.

No introduction is made to a child unless the mother has previously asked for help in obtaining a suitable adopter. These mothers are never helped with adoptions until they have first been advised to keep their children and other means of help have been suggested or offered and refused.

NURSING HOMES REGISTRATION ACT, 1927.

There were 30 registered nursing homes in Manchester at the beginning of 1935. 7 were registered for maternity patients; 6 for medical patients; 8 for maternity, medical, and surgical; 2 for maternity and surgical; 4 for maternity and medical; 1 for surgical; and 2 for medical and surgical.

During 1935, 2 applications for registration were received. 2 were registered (1 applied in 1934), 1 was held over. In connection with these homes 4 visits were paid.

One home was re-registered owing to change of keepers. 36 visits were paid to homes already registered. 5 visits were also paid to 5 houses reported as being used as nursing homes. 3 did not come within the meaning of the Act, and 2 cases were referred to the Town Clerk and cautionary letters sent.

Two new homes were registered.

Total visits paid, 40.

EXEMPTION FROM REGISTRATION OF VOLUNTARY HOSPITALS.

During 1935, 15 applications were received for exemptions under Section 6 of the Nursing Homes Registration Act, 1927, and all were granted.

SUMMARY OF WORK FOR THE YEAR 1935.

No. of applications for registration		Maternity	—
		Maternity and others	2
		Others	—
No. of homes registered..		Maternity	—
		Maternity and others	—
		Others	—
No. of homes discontinued.		Maternity	2
		Maternity and others	1
		Others	—
No. of orders made.....	Refusing	Maternity	—
		Maternity and others	—
		Others	—
	Cancelling	Maternity	—
		Maternity and others	—
		Others	—
No. of applications for exemption from registration		Maternity	—
		Maternity and others	2
		Others	13
No. of cases in which exemption has been—	Granted	Maternity	—
		Maternity and others	2
		Others	13
	Withdrawn.....	Maternity	—
		Maternity and others	—
		Others	—
	Refused.....	Maternity	—
		Maternity and others	—
		Others	—

WYTHENSHAW.

The census of 1931, the year in which the City boundaries were extended to include Wythenshawe, placed the population of the ward at 6,859.

During the ensuing years the development of the area as a Corporation Housing Estate has resulted in a steady growth of population, the figure at the end of 1935 being 30,907.

In February, 1934, the City Council approved of the provision of two main infant welfare centres—one to the north of the Altrincham-Stockport Road, in the region of the Rackhouse Estate, and one in the Benchill district; the latter to be built in conjunction with the school clinic for that area.

In June, 1935, Beech House, Yew Tree Lane, Northenden, was bought by the Committee for a welfare centre to serve the northern part. The centre was opened on September 23rd with two infant sessions. The number of attendances increased rapidly, and on December 13th an extra infant session was added. On October 11th a session for expectant mothers was begun. Massage and remedial exercises for children were begun on October 17th and a cookery class on November 19th.

The centre has been much appreciated, as the following table of attendances shows :—

Week ending	Attendances (children)	Ante-natal	Remedial exercises (children)	Massage	Cookery
27—9—35 ..	74	—	—	—	—
5—10—35 ..	157	—	—	—	—
12—10—35 ..	146	5	—	—	—
19—10—35 ..	213	8	11	9	—
26—10—35 ..	198	12	no class	11	—
2—11—35 ..	179	13	15	15	—
9—11—35 ..	233	15	16	16	—
16—11—35 ..	171	14	15	9	—
23—11—35 ..	206	18	12	10	6
29—11—35 ..	161	11	11	14	20
6—12—35 ..	168	12	16	13	22
13—12—35 ..	167*	16	12	15	19
21—12—35 ..	70	14	6	8	14
	2,143	138	114	120	81

* 3rd session begun Friday P.M., December 13th, 1935.

The following table illustrates the increase in the number of children under five during the same period :—

Wythenshawe Births—1930-1934.

Year	Children Born in Wythenshawe	" Founds " (residing in Wythenshawe after removal from districts outside the Manchester Area)	Removals to Wythenshawe from other districts in Manchester	Removals from Wythenshawe	Deaths	Total
1931 ..	98	20	307	20	6	399
1932 ..	116	24	474	19	4	591
1933 ..	218	39	364	27	16	578
1934 ..	595	13	88	30	27	639
1935 ..	680	33	96	46	52	711
	1,707	129	1,329	142	105	2,918

For the effective supervision of all children under 5 it is found that not more than 250 births per annum should be allotted to one health visitor, this constituting a district of approximately 1,000 children. According to this standard, Wythenshawe at the end of 1935 required 3 health visitors.

During the year 9,295 visits were made by the health visitors in this area (see general table of health visitors' work, page 332A), a smaller number than the average for the rest of the City. There are certain factors peculiar to health visiting in Wythenshawe which continue to present a problem. For example :—

- (1) The distance of Wythenshawe from the Central Office results in an excessive amount of time being spent in travelling.
- (2) The average family is small ; and the number of individual homes, therefore, greater than obtains in the more closely-populated gardenless parts of the City.

The difficulty in obtaining transport between the various estates and the loss of valuable time in waiting for buses to the more distant parts has been reduced to some extent by the provision of bicycles.

The want of a child welfare centre in the southern part of the area is becoming even more felt now that the population here is increasing rapidly from the slum clearance areas.

Puerperal Pyrexia and Ophthalmia Nursing.

Wythenshawe is at present included in the nursing done by these nurses, as shown on page 287. During 1935 the maternity nurses paid 135 visits and the ophthalmic nurses 300.

WORK DONE BY THE HEALTH VISITORS.

Staff.

There has been no change during 1935, the staff consisting of superintendent, assistant superintendent, 60 full-time health visitors, a cleansing nurse, and 8 clerks. As in the previous year, 4 students were appointed for a period of 12 months under the training scheme arranged in co-operation with the Municipal College of Technology, but as six months is devoted to training, and part of the second six months to relieving the staff in the child welfare centres, they contributed but little additional work to the health visitors' section during 1935.

Notification of Births Act.

The total number of notifications received under the Notification of Births Act was 12,921, of which 7,847 were from doctors, 5,044 from midwives, and 30 from parents. 12,289 notifications referred to live births and 632 to still-births.

In the preceding year 13,055 notifications were received.

The total registered births for the city during 1935 numbered 11,822 of which 11,276 were live births and 546 still-births.

The actual number of new live births allocated to the health visitors for visiting during the year was 11,249, or 99·8 per cent. of the total live registered births.

It has been possible in 10,837 births—representing 96·1 per cent. of the total births of the city—to consider in detail the place in family of each birth, and this is shown in the following table :—

Year's Births arranged to show Place in Family.

Place in family	Number of Pregnancies		Per cent.
	Legitimate	Illegitimate	
1st	3,719	275	36·85
2nd	2,681	90	25·57
3rd	1,469	33	13·86
4th	880	19	8·3
5th	529	22	5·1
6th	369	3	3·5
7th	258	4	2·42
8th	179	3	1·68
9th	118	6	1·14
10th	80	—	·73
11th	44	1	·41
12th	18	—	·16
13th	16	—	·14
14th	8	1	·08
15th	4	—	·03
16th	1	—	·01
17th	1	—	·01
19th	1	—	·01
Total ..	10,375	462	100·0
	10,837		

It will be noted that, for the first time, the place in family of illegitimate births has been calculated as well as legitimate births. This comparsion throws an interesting light on the present distribution of births in the city.

So much attention has recently been drawn to the fall in the birth rate that it was felt an enquiry into the age of mothers at the birth of first and subsequent children would be valuable.

An attempt has been made to compile a table from the health visitors records of 10,760 births, and the result is shown below :—

AGE OF MOTHERS AT BIRTH OF CHILDREN DURING 1935.
Showing Place in Family of each Birth.

AGE GROUPS	PLACE IN FAMILY																		TOTAL BIRTHS
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	
15—19 ..	294	25	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	320
20—24 ..	1,617	718	184	39	9	1	1	..	..	..	..	..	..	..	..	..	..	..	2,569
25—29 ..	1,419	1,054	540	253	97	44	19	2	2	..	..	..	..	..	..	..	..	..	3,430
30—34 ..	489	627	486	337	207	140	74	50	17	7	5	1	..	..	..	..	..	..	2,440
35—39 ..	118	288	235	194	159	132	111	88	65	30	16	6	4	1	2	..	..	..	1,449
40—44 ..	18	40	50	68	69	53	53	40	31	32	18	6	7	5	1	1	1	1	494
45—49 ..	..	2	..	5	9	6	4	1	6	7	5	5	4	3	1	..	..	..	58
	3,955	2,754	1,496	896	550	376	262	181	121	76	44	18	15	9	4	1	1	1	10,760

“ Found ” Children.

In addition to the notified or registered births, the health visitors also visited 986 other children for the first time. They belonged to families who removed into Manchester during the year. The year of their birth is given below :—

263	children	born in	1935
260	„	„	1934
234	„	„	1933
164	„	„	1932
65	„	„	1931
<hr/>			
986			

Deaths.

The age group classification of deaths occurring amongst children under five years of age is :—

804 deaths of children under one year of age.			
166	„	„	1 to 2 years of age.
65	„	„	2 to 3 „ „
59	„	„	3 to 4 „ „
48	„	„	4 to 5 „ „

The sub-joined table shows the distribution of deaths according to age for the children under one year :—

Died under 1 day	Died 1 to 7 days	Died 1 week to 4 weeks	Died 1 month to 3 months	Died 3 months to 6 months	Died 6 months to 9 months	Died 9 months to 12 months
119	126	134	166	115	74	70

Table 3 (page 333), shows the classification of these deaths in wards and according to the principal causes of death. Tables 4 (page 334) and 5 (page 335) show a similar classification for the age groups 1 to 2 years and 2 to 5 years.

The following table, Table A, gives mortality rates for the past ten years amongst children aged one to five years, based upon the number of live births for the year.

As was mentioned in last year’s report, the curves for infant mortality and for the mortality amongst these young children show approximate similarity, which is to be expected, as both infancy and the early years of childhood are affected, to a considerable extent, by the same groups of diseases. The table also demonstrates clearly (when compared with the epidemic records) the high peaks of mortality in the one to five year period during years of epidemic of severe type. The mortality rates for measles and whooping cough have also been included as making the survey more complete

TABLE A.

YEAR	Infantile mortality rate	Mortality rate, 1—2 Group	Mortality rate, 2—5 Group	Mortality rate, 1—5 Group	Total Cases of Measles		Total Cases of Whooping Cough	
					Cases	Deaths fatality rate per cent.	Cases	Deaths fatality rate per cent.
1926 ..	87	..	..	47.2	10,953	1.42	2,094	2.91
1927 ..	86	28.4	22.6	55.01	13,987	1.17	2,244	5.52
1928 ..	91	27.7	18.1	44.2	7,141	1.72	3,189	2.79
1929 ..	97	29.6	21.8	53.6	9,512	.63	4,037	5.44
1930 ..	79	18.5	15.5	34.08	10,738	1.35	1,388	2.66
1931 ..	84	22.7	18.2	41.06	7,771	.83	3,150	2.73
1932 ..	85	22.1	20.3	42.49	12,238	.99	2,280	3.50
1933 ..	75	16.4	17.0	33.46	6,350	.75	2,230	2.11
1934 ..	69	14.8	18.2	32.11	11,383	.85	1,565	2.23
1935 ..	71	14.7	15.2	29.9	9,907	.98	1,632	2.81

* Transferable deaths not included for these years.

Still-births.

The health visitors investigated 455 still-births occurring in the practice of doctors and midwives and in the various city hospitals.

Ante-natal Care.

During the year, in the course of their routine visits, the health visitors saw and advised 2,006 expectant mothers.

In addition, 798 special visits were paid at the end of a period of six months to homes where a still-birth or neo-natal death had occurred, with a view to ascertaining whether help was needed in a further pregnancy. As the result of these visits 180 expectant mothers were brought to our notice. These ante-natal cases were revisited regularly at intervals of one month, and the health visitors paid 556 visits to these mothers, many of whom also attended the corporation ante-natal clinics, held at the infant welfare centres and at Withington and Crumpsall hospitals.

Summer Diarrhœa.

From July 15th to September 30th 80 cases of summer diarrhœa were visited. Of these, 22 occurred during the last two weeks in July, 32 during the month of August, and 26 during the month of September. These figures are slightly lower than those for the preceding year, when 86 cases were visited. Medical attention was obtained in 68 instances, and 24 children were nursed in hospital.

The details and distribution of these cases are shown in table B which immediately follows:—

TABLE B.

SUMMER DIARRHŒA. CASES VISITED BY THE HEALTH VISITORS IN 1935
(CHILDREN UNDER 5 YEARS) COMPARED WITH THOSE VISITED DURING
THE FOUR PRECEDING YEARS.

	Year				
	1931	1932	1933	1934	1935
Total number of cases visited	69	104	78	86	80
Number of cases occurring in—					
July (15th–31st)	15	33	21	38	22
August	36	43	27	33	32
September	18	28	30	15	26
<i>Cases in Wards.</i>					
All Saints .. .. .	..	..	5	7	3
Ardwick	8	4	3	2	8
Beswick	4	2	3	1	2
Blackley	1	5	3	..	..
Bradford	5	14	3	..	2
Collegiate .. .. .	..	..	2	1	..
Collyhurst	2	7	3	2	1
Cheetham	1	1	7	1	2
Crumpsall .. .. .	..	..	1	1	1
Gorton North	4	3	..	1	12
Gorton South	2	10	7	7	2
Harpurhey .. .. .	..	2	..	2	5
Levenshulme	1	..	..	2	2
Longsight .. .. .	..	..	..	2	..
Medlock Street	8	3	4	8	4
Miles Platting	3	3	3	7	6
Moston .. .. .	..	3	..	2	..
Moss Side East .. .. .	..	2	1	3	..
Moss Side West .. .. .	..	..	3	..	2
New Cross	3	11	4	7	7
Newton Heath	2	6	3	7	2
Openshaw	3	2	1	3	1
Rusholme	4	3	7	2	5
St. Clement's	2	1	..	..	..
St. George's	7	5	1	5	2
St. John's .. .. .	..	3	1	1	1
St. Luke's	1	3	3	3	2
St. Mark's	2	1	2	1	3
St. Michael's	3	3	4	..	..
Withington, Didsbury, and Chorlton-cum-Hardy	3	7	1	5	1
Wythenshawe .. .. .	..	..	3	3	4
Number affected under 1 year of age	43	58	38	57	42
Method of feeding at onset of illness—					
Breast	12	13	11	10	3
Mixed	5	10	9	9	15
Hand	26	35	18	38	62
Deaths—					
Total number	18	16	8	22	18
Number under 1 year of age	18	14	6	10	15
Number under 4 months of age	11	7	3	12	12

Rickets.

Provision for the residential treatment of children suffering from severe rickets, in children under 5 years of age, was continued at Swinton House.

During 1935, four children were admitted through our representations to the Education Department, a considerable decrease compared with 1934, when twelve children were admitted. These children were suffering from severe rickety deformity as the result of failure on the part of the parents to obtain, or follow up treatment, in the earlier stages.

Two of the admissions were only effected after considerable opposition on the part of the parents, but the severity of the deformity was so great that in the interests of the children, perseverance was necessary, even to the extent of enlisting the assistance of the N.S.P.C.C.

The children actually admitted do not by any means represent all who would have benefitted by residential treatment. In some cases, we reluctantly agreed to a probationary period of compromise, supervised by the N.S.P.C.C., during which the parents fulfilled a promise to attend regularly the out-patients' department of one or other of the hospitals in the City, or a Child Welfare Centre, and carry out whatever treatment was advised.

The four children admitted to Swinton House were between 3 and 5 years old, and they came from the following districts:—

Bradford	..	..	..	2
Collyhurst	..	..	..	2

Co-operation with the School Medical Department.

The reports of school medical officers not infrequently refer to the large proportion of children who commence their school life in an unsatisfactory state of health.

The records of these children from birth to the completion of their pre-school age, when fully kept, could often throw an interesting and useful light on some of these unsatisfactory conditions.

For the past seventeen years an attempt to do something of this kind has been made, but it would require a considerable addition to the present staff to permit of all the pre-school histories being sent to the school medical department. We have effected a compromise by preparing summaries of the first five years of life, in markedly unsatisfactory cases. These are divided roughly into five groups, namely:—

GROUP I.—Special Histories.

Children with congenital defects, or in whom serious illness, or other unsatisfactory physical conditions have been present.

GROUP II.—Unsatisfactory Children.

Children who at the completion of their fifth year have some definite unsatisfactory physical condition which we have reason to believe has not yet come to the notice of the school medical department.

An analysis of the reasons which prevented the admission of the 18 other children recommended, but not admitted, is given below :—

	children
Admitted to private cots	4
„ „ other hospitals	6
Improved whilst on waiting list	3
Parents' permission withheld	3
Unsuitable case	1
Died before a vacancy occurred	1
Total	<u>18</u>

The diagnosis made in the case of infants admitted to small cots in the Babies' Hospital was as follows :—

Dyspepsia	35	Vomiting	3
Gastro-enteritis	12	Debility	3
Atrophy	11	Pyloric Stenosis	3
Prematurity	9	Hernia.. .. .	3
Bronchitis	7	Diarrhoea	2
Marasmus	7	Pneumonia	2
Rickets	6	Otitis Media	2
Malnutrition	5	Hydrocephalus	1
Anæmia	3	Congenital Syphilis	1
		Total	<u>115</u>

The ages of the infants on admission were :—

Under 1 month	3	Aged 7 months.. .. .	8
Aged 1 „	26	„ 8 „	4
„ 2 months	17	„ 9 „	3
„ 3 „	16	„ 10 „	3
„ 4 „	12	„ 11 „	3
„ 5 „	7	„ 12 „	1
„ 6 „	6	Over 12 „	*6
		Total	<u>115</u>

The length of stay in hospital varied from 3 days to 36 weeks. The average was about 7 weeks.

* These children, though over age, being greatly underweight and undersized, were admitted as urgent "cot " cases.

For the older children, admitted either to the large cots in the Babies' Hospital, to the Babies' Ward, Monsall Hospital, or to Booth Hall Hospital, the various diagnoses are grouped under the following headings:—

Rickets	51
Malnutrition	11
Enlarged Tonsils and Adenoids	10
Bronchitis	8
Gastro-enteritis	6
Retarded Mental Development	5
Atrophy	5
Anæmia	5
? Whooping Cough	4
Dyspepsia	4
Debility	4
Pyelitis	3
Eczema	2
Diarrhœa and Vomiting	2
Abscesses	2
Marasmus	2
Pneumonia	2
Constipation	2
Dermatitis	1
Gingivitis	1
Prematurity	1
Impetigo	1
Asthma	1
Monoplegia	1
Pink Diasese	1
Threadworms	1
Total	<hr/> 136 <hr/>

MEASLES, GERMAN MEASLES, WHOOPING COUGH, AND PNEUMONIA.

Measles.

The investigation of cases of measles has been carried out without a break since 1916, and is directed towards securing the best provision for the isolation of infective cases, preventing the spread of infection, and reducing the risk of infection amongst children under five years of age.

First cases of measles and german measles in a household are notifiable, and the majority of notifications are received from medical practitioners. A number, however, are reported by the education authority, and subsequent cases are either discovered by the health visitor or are notified by the parents on a postcard left for the purpose by the health visitor at her previous visit.

When a doctor is already in attendance, the health visitor is responsible only for ascertaining the source of infection, ensuring the isolation of the case, arranging school exemption, and advising as to the domiciliary disinfection which should be carried out.

Frequently, however, mothers appeal to the health visitor for assistance in carrying out the doctor's instructions regarding the nursing of the patient, and the hygiene of the sick room. This applies particularly to the poorer closely populated district of the city where the disease spreads rapidly, and where facilities and materials for adequate home nursing are difficult to secure.

As primary cases only are notifiable, the health visitor, in her supervision of contacts, is often the means of discovering other children who have developed the disease. Many parents are reluctant to summon a doctor for a subsequent case, though these are usually pre-school children in whom the illness runs a more virulent course than in school children, and for whom early medical supervision is all important. It is sometimes difficult, too, for parents to recognise signs that the disease is taking an abnormal course, and the health visitor's visits are valuable in securing the recall of the doctor in time to prevent its complications becoming serious.

The Public Health Committee has an arrangement with the Manchester and Salford District Nursing Association for the nursing at home, where necessary, of children suffering from measles and its complications. Accommodation is provided in Monsall and Booth Hall Hospitals also for the reception of such children where the home conditions are unfavourable.

A grant, originally made in 1917, to obtain milk for young children suffering from measles in families where the income is below the standard scale is made after the circumstances have been investigated by the health visitor. Particulars of this will be found on page 329.

The amount of work involved in the control of measles and whooping cough can be seen in the tables given below, and its importance is emphasised by the fact that these two infections of childhood cause more deaths and incapacitation than all the other infectious diseases.

Measles.

Cases notified by doctors	7,976
Cases found by health visitors or notified by other than doctors	1,931
Total number of known cases	9,907
Total number of cases investigated	9,907

This is a decrease of 1,476 over the previous year.

The sub-joined table shows the incidence of pneumonia in these cases and their distribution according to home cases or hospital cases :—

	Nursed at home		Removed to hospitals		* Developed Measles whilst in hospitals		Totals
	9,338		464		105		
	Not having Pneumonia	Com-plicated by Pneumonia	Not having Pneumonia	Com-plicated by Pneumonia	Not having Pneumonia	Com-plicated by Pneumonia	
Number of cases ..	9,192	146	313	151	91	14	9,907
Recovered ..	9,187	106	302	94	88	5	9,783
Died	5	40	11	57	3	9	125
Case fatality.	0.54%	27.39%	3.51%	37.74%	3.29%	64.28%	1.26%

* Patients in hospital for other conditions developing measles.

In addition 65 cases were found after complete recovery had been made and are classified as “late” cases.

The cases removed to hospital are as a rule of a more serious type. This accounts for the somewhat higher mortality rates in that group.

The total visits paid to measles cases was 18,277.

German Measles.

Total number of german measles cases notified	1,180
“ “ “ “ visited	1,180
“ “ “ “ recovered	1,180
“ “ “ “ died	—

The number of visits paid by the health visitors in respect of german measles was 2,512 (a considerable increase over the number for 1934).

Whooping Cough.

Whooping cough is not compulsorily notifiable, but parents and guardians of school children are required to notify the head teacher of any child known or suspected to be suffering from the disease. In addition to the notifications thus received from the Education Department, a considerable number of cases are discovered in the course of home-visiting, but this total by no means represents the actual number, as many cases escape our notice.

The home visitation of children suffering from whooping cough follows the same lines as that of measles. The number of cases notified was 1,623, all of which were visited.

The sub-joined table shows the incidence of pneumonia in these cases and their distribution according to home cases or hospital cases :—

	Nursed at home		Removed to hospitals		* Developed Whooping Cough whilst in hospitals		Totals
	1,467		161		4		
	Not having Pneumonia	Com-plicated by Pneumonia	Not having Pneumonia	Com-plicated by Pneumonia	Not having Pneumonia	Com-plicated by Pneumonia	
Number of cases ..	1,419	48	112	49	3	1	1,632
Recovered ..	1,409	26	107	28	3	..	1,573
Died	10	22	5	21	..	1	59
Case fatality.	·704%	45·8%	4·46%	42·85%	..	100%	3·61%

* Patients in hospital for other conditions developing whooping cough.

In addition 547 cases of whooping cough were found after complete recovery had been made, and have been classified as “late” cases.

The total number of visits paid to whooping cough cases was 3,842.

The case-fatality in the two groups relating respectively to measles and whooping cough is based on the actual number of investigated cases which ended fatally, whether the registered cause of death specifically mentioned these diseases, or, as in many cases, merely gave the cause of death as pneumonia.

INFLUENZA AND PNEUMONIA.

Influenza is not notifiable, but all cases which come to the notice of the health visitors, either in the course of their own enquiries or through the death returns, are investigated. The resultant figures, however, are of little value in comparing the incidence of influenza in various parts of the city, for the term is rather loosely applied by some parents to a chill or slight indisposition.

Although acute primary pneumonia is notifiable, approximately 15 per cent. of the total number of known cases are not notified, but are revealed through the death returns. It is recognised that diagnosis is sometimes difficult, but in a considerable number of cases nursing help and additional nourishment could be provided if notification of the illness were received earlier.

The figures relating to the investigation of influenza and pneumonia are given on pages 336 to 339.

Assistance.

The grant (originally made in 1917) to supply milk to young children suffering from measles, whooping cough, and pneumonia in families where the actual income is below the standard scale, was continued during the year. Applications for milk were granted in 1,400 cases, and 19,739 pints of milk were given.

The general statistics relating to measles, german measles, and whooping cough are found on pages 47 to 50.

WORK AT THE CLEANSING STATION.

Vermin.

As in previous years the Education Department was the main source of notification of verminous cases, and 450 notifications were received as compared with 656 in the preceding year, 470 in 1933, and 376 in 1932.

The treatment of verminous persons and notified cases of scabies was transferred to Monsall Cleansing Station from Oldham Road on July 30th, 1935. During the year the Station was in use for the compulsory cleansing of 20 school children and of 47 voluntary cases on 21 days throughout the year.

Formerly all school children requiring compulsory cleansing were referred to this department and they were cleansed by the special nurse appointed for the purpose. These cleansings are now mostly carried out as voluntary cleansings by the school nurses at various centres in the city, and only one case was brought to the Court for prosecution during the year.

In addition to her work at the cleansing station, the special nurse carried out in the home the cleansing of two persons suffering from a serious verminous condition of the head. This assistance was rendered because there was no responsible person in the home to undertake the duty. The nurse also paid 372 other visits to verminous cases.

Scabies.

Our main source of information is the Education Department, who sent to us 638 notifications in respect of scabies amongst school children, as compared with 715 in the preceding year, but as in previous years many additional cases were brought to our notice as contacts of those notified.

It was thus often necessary to make provision for the treatment of cases of scabies other than school children at the cleansing station, which was in use for this purpose on 200 days. The average number of treatments per person is three, and altogether 753 treatments were given.

Evidence of the usefulness of the work is found in the number of individual requests for treatment made to the department during the year, including some requests from medical practitioners in respect of families having several members affected. The disinfection of the bedding was stipulated for in every case before arrangements for treatment were completed, and though there was frequently reluctance, very little real opposition was encountered. The personal clothing is disinfected each time the patient attends for treatment.

Disinfestation of Persons removed under Slum Clearance Scheme.

This work was transferred from Clayton Hospital to Monsall Disinfecting Station on July 30th, 1935, and the following table shows the number of persons treated during the five months ending December 31st, 1935. Further reference to this work is contained on page 355.

Males	Females	School Children	Infants	Total
107	105	99	50	361

N.S.P.C.C.

We are again indebted to this Society for very valuable help, particularly for the assistance given in connection with children suffering from severe rickety deformity who were admitted to Swinton House. During the year 30 cases were referred for various reasons. We gratefully acknowledge the help given by the Society.

Jewish Ladies' Visiting Association.

This Association employs a nurse, who is also qualified as a health visitor. Her time is partly given to charitable work amongst the Jews and partly to maternity and child welfare work. The latter portion of her work is done under the general supervision of the Public Health Department, and whilst mainly devoted to the care of mothers and children under five, included 644 house to house inspections under the direction of the above Association. Details of her public health work are shown in the following table :—

District	Infant Work			ANTE-NATAL CARE								Sanitary Defects			Total Number Visits						
				Stillbirths		Neo-Natal Deaths		Expectant Mothers		Verminous											
Red Bank and Strangeways	Infants Under 1 year	Subsequent Visits	Children 1 to 5 years	Primary		Subsequent		Primary		Subsequent		Primary		Subsequent		Found		Remedied		24	
				Ex.		Non-Ex.		Ex.		Non-Ex.		Ex.		Non-Ex.		Special Visits to either					
				11	8	12	5	5	7	121	199	4	12	3		8	65	35	139		69	6

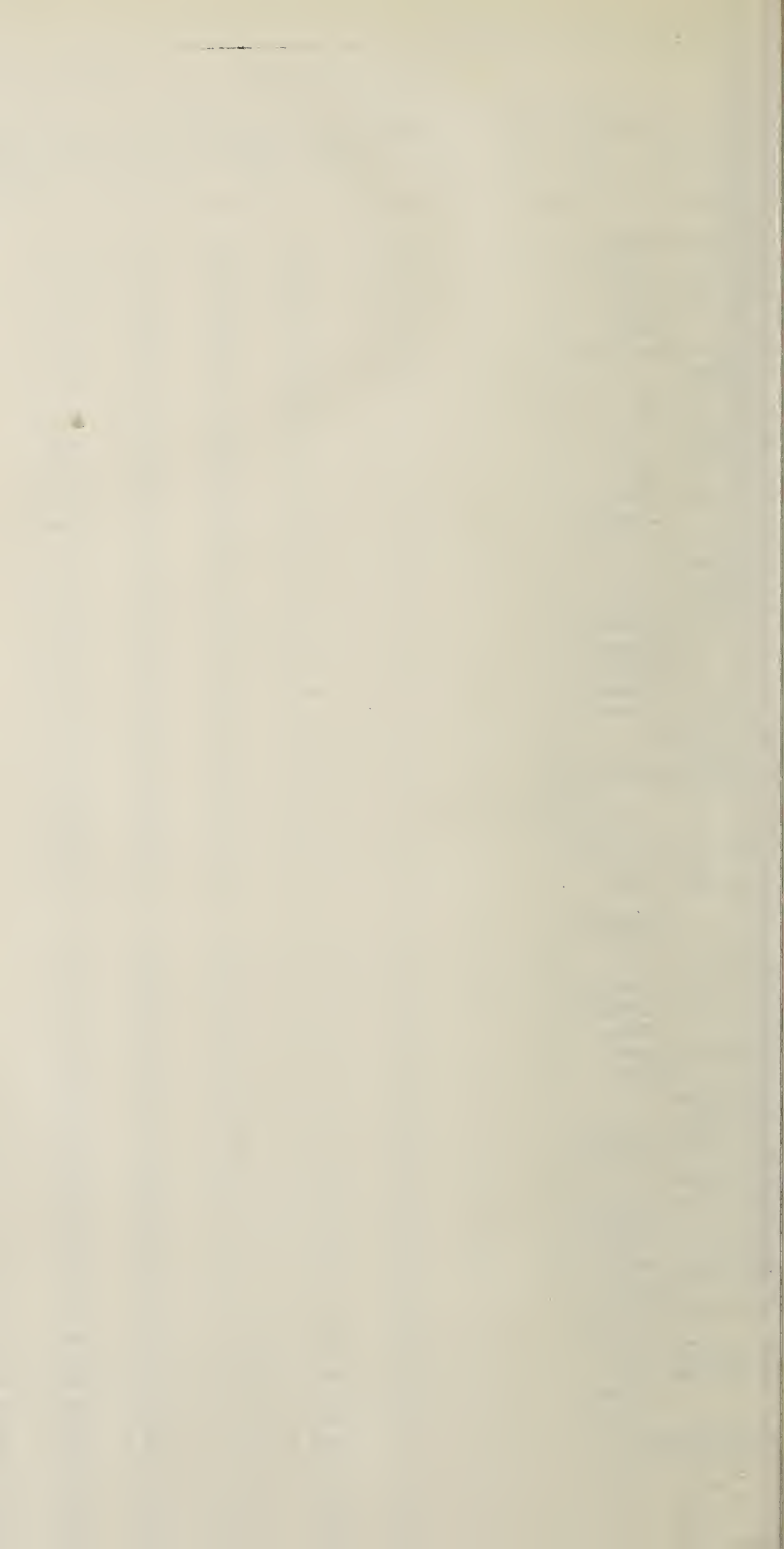
In addition, the Jewish Health Visitor made 45 attendances at a Child Welfare Centre during 1935.

TABLE 2—SHOWING THE WORK DONE BY THE HEALTH VISITORS IN 1935 AND THE FOUR PRECEDING YEARS.

Classification of visits	1931	1932	1933	1934	1935
Primary visits to infants	12,665	12,202	11,517	11,880	11,692
Subsequent visits to infants under 1 year	58,971	56,416	52,351	49,104	42,646
Subsequent visits to children 1-5 years	135,193	136,342	131,691	131,142	112,865
Other visits <i>re</i> infants and young children	111	80	70	1,777	19,631
Still-birth investigations	380	359	471	475	455
Other ante-natal visits	2,671	2,658	3,154	2,975	3,358
Measles—Primary visits	7,682	12,386	5,963	11,572	9,531
„ Subsequent visits	9,239	20,975	6,171	19,631	8,746
German measles—Primary visits ..	2,550	1,634	296	389	1,114
„ Subsequent visits	3,561	2,057	390	355	1,398
Whooping Cough—Primary visits ..	3,038	2,156	2,164	1,509	1,542
„ Subsequent visits	5,704	3,843	3,631	2,439	2,300
Pneumonia—Primary visits	2,873	2,896	3,041	2,089	2,507
„ Subsequent visits	4,500	4,114	3,760	2,639	2,679
Influenza—Primary visits	895	367	1,594	118	337
„ Subsequent visits	594	231	1,257	91	227
Verminous cases—Primary visits ..	242	267	353	522	355
„ Subsequent visits	836	697	859	1,177	693
Scabies cases—Primary visits	405	406	365	372	347
„ Subsequent visits	732	720	756	688	602
Visits <i>re</i> sanitary defects	113	113	114	84	112
Visits <i>re</i> relief	29	55	24	16	37
Special investigations	54	31	25	45	140
Unsuccessful visits	2,312	2,395	1,883	2,124	1,343
Total visits	255,350	263,400	239,100	243,213	224,657
Number of health visitors	59 (1 part-time at centres)	60	60	60	60
Number of districts worked	55	56 (1 temporary H. V. worked ten months Sick Relief duty)	56	56	60
Attendances at child welfare centres ..	3,694	4,806	4,793	5,180	5,256
Attendances at Diphtheria Immunisation Clinics	..	..	..	189	228

TABLE 1.—HEALTH VISITORS' YEARLY SUMMARY—TOTALS FOR THE FIFTY-TWO WEEKS ENDING DECEMBER 28th, 1935.

INFANT WORK										ANTE-NATAL CARE					OVERCROWDING AND SANITARY DEFECTS					SCABIES		VERMINOUS WORK		MEASLES WORK		WHOOPING COUGH		PNEUMONIA		INFLUENZA		MISCELLANEOUS VISITS										No. of Senior at Centre	TOTAL VISITS	REMARKS			
DISTRICT	No. of Births	Primary Visits	Subsequent Visits	Children 1 to 2 years	Children 2 to 3 years	Children 3 to 4 years	Children 4 to 5 years	Investigations re Deaths of Children under 5 years from D. Arrives	Still Births		"Neo-Natal Deaths" Revisits		Expectant Mothers		Over-crowd-ings	Over-crowd-ings Abated	Defects Found	Defects Remedied	Special Visits to either	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Measles		German Measles		Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits	Visits re Infantile Diarrhoea	Visits re Relief	Visits "Out"	Wrong Addresses		Special Visits				Removals and Child not seen	D. I. Cl.	Nurse Children over 5
									Primary Visits	Subsequent Visits	Ex	N.P.	Ex	N.P.										Primary Visits	Subsequent Visits	Primary Visits	Subsequent Visits												Primary Visits	Subsequent Visits							
All Saints—North	166	181	932	720	620	575	459	1	4	..	3	4	3	106	3	(3)	..	(21)	15	22	18	51	184	206	22	38	50	49	20	26	(1)	5	(10)	3	152	(3)	..	60	4,472	District formed 1 7 35.	
—South	199	153	460	342	305	317	308	1	12	..	1	..	3	53	5	(15)	(1)	1	15	22	18	51	184	206	22	38	50	49	20	26	(1)	5	(10)	3	152	(3)	..	60	4,472		
Ardwick—North	196	249	1,230	884	895	1,019	601	..	14	1	1	..	3	4	(1)	17	30	4	6	201	222	14	16	5	23	21	13	..	1	(2)	262	(8)	..	39	2,804			
—Central	145	68	283	235	192	170	232	..	3	1	2	3	3	25	..	(1)	..	(8)	(4)	..	1	4	5	31	171	99	17	27	22	25	62	77	1	127	(3)	..	70	5,580			
—South	150	201	880	636	631	548	637	5	5	..	5	1	5	10	10	(1)	..	(4)	12	22	24	39	117	123	15	20	25	40	31	51	..	4	108	46	1,551			
Barlow Moor Estate	144	105	559	388	355	344	448	..	8	1	3	..	2	74	3	9	..	1	59	31	18	31	20	25	15	23	6	1	385	(12)	..	94	4,482				
Blackley	222	228	509	441	393	359	551	..	6	5	10	4	4	49	19	(1)	..	(9)	(1)	2	7	6	4	13	183	105	..	1	27	71	32	27	(1)	..	(4)	1	238	..	115	2,832			
Bradford—A	218	219	541	371	402	418	555	..	11	..	4	1	4	36	(37)	(7)	..	5	7	5	7	186	144	7	10	13	16	33	31	4	238	4	88	3,474		
—B	157	100	574	359	351	364	397	3	8	..	6	..	4	14	2	(3)	..	(24)	(1)	1	12	18	4	3	79	78	9	11	9	16	19	24	12	5	2	132	(3)	1	79	3,103		
Cheetham—A	177	179	595	440	489	463	380	1	4	1	6	3	5	9	1	(1)	..	(9)	(1)	..	5	5	3	6	11	104	12	23	15	16	18	26	1	1	4	1	..	69	2,904			
—B	158	165	537	395	379	301	341	1	6	1	14	8	(9)	(1)	..	5	5	3	1	104	12	23	15	16	18	26	1	1	8	3	4	233	99	3,170	
Collyhurst—North	186	167	550	466	433	400	402	2	9	1	..	9	1	14	8	2	3	1	2	116	52	19	28	9	21	11	10	1	66	55	2,489		
—South	171	184	885	567	519	425	523	..	7	8	11	..	7	30	8	(1)	..	2	5	10	1	..	156	88	11	16	32	65	29	17	10	7	7	492	(1)	..	67	3,440		
Chorlton-cum-Hardy	204	205	949	734	624	626	617	2	13	1	10	..	5	74	17	(28)	(22)	5	6	16	5	15	239	207	30	67	30	61	9	8	149	(6)	2	91	4,025			
Campsall	254	243	946	465	391	273	356	..	3	..	4	1	7	24	4	(2)	(1)	..	3	7	..	1	55	31	11	17	29	49	17	14	3	3	350	(8)	..	92	5,108			
Didsbury	231	224	843	773	793	650	654	3	4	..	4	(3)	9	12	3	13	38	42	3	6	14	33	26	35	1	6	139	(3)	..	107	4,238	
Gorton—North-east	187	125	315	224	193	162	214	..	3	4	..	4	12	3	13	3	97	79	22	27	11	6	12	11	(18)	12	1	9	385	(4)	..	101	3,959		
—North-west	181	185	835	634	500	470	505	..	8	..	8	..	5	38	20	(1)	..	(12)	2	13	1	2	137	89	10	27	15	25	15	10	3	59	57	1,671
—South-east	165	175	1,034	730	636	571	576	3	10	1	6	..	3	46	62	(1)	..	(15)	(9)	..	10	17	7	25	92	70	7	6	34	48	24	46	11	5	(3)	5	1	13	385	..	1	92	4,660		
—South-west	202	230	1,184	842	678	597	771	6	15	..	19	1	14	36	34	(1)	4	7	4	6	75	44	10	22	2	12	35	47	2	236	(5)	..	112	4,933		
Harpurhey—North	185	181	751	691	603	525	390	..	4	1	4	1	2	41	14	(6)	(1)	..	9	14	3	16	24	13	18	12	20	21	22	27	50	39	22	269	(3)	1	99	3,878		
—South	210	125	278	177	156	145	240	..	5	2	6	2	2	16	3	(3)	..	(11)	(8)	21	4	26	4	10	57	47	..	2	26	55	4	5	6	3	9	1	361	..	2	46	1,807			
Levenshulme	223	213	712	350	311	288	440	1	5	..	11	5	3	58	(50)	(18)	..	1	5	4	17	113	180	2	3	17	27	17	42	9	13	2	494	127	3,486		
Longsight	141	138	651	467	435	374	450	..	11	1	7	..	5	1																																	



WARD	Number of health visitors working in the district	Number of deaths of children under 1 year of age	Bronchitis and Pneumonia	Prematurity	Debility and Marasmus	Dystocia	Enteritis	Convulsions	Tuberculosis	Syphilis	Accidental Deaths, including Want of Attention at Birth	Influenza	Measles	Whooping Cough	Other Causes
All Saints ..	2	43	8	10	1	2	1	3	..	1	3	..	2	2	10
Ardwick ..	2	41	10	17	1	..	4	..	..	..	1	1	..	1	6
Beswick ..	2	35	4	12	1	1	6	1	..	..	1	..	..	1	8
Blackley ..	1	15	3	6	..	..	..	..	..	..	2	..	..	..	4
Bradford ..	3	14	5	2	1	..	2	1	..	..	..	..	..	..	3
Cheetham ..	2	15	1	6	..	1	2	2	..	..	1	..	..	..	2
Chorlton-cum-Hardy	2	25	1	10	..	..	..	1	..	..	..	..	..	..	12
*Collegiate..	2	20	4	6	..	..	1	1	..	..	1	..	..	1	7
Collyhurst ..	2	32	4	10	6	..	3	3	..	..	..	..	..	..	6
Crumpsall ..	1	21	3	9	1	2	2	..	..	..	..	..	..	1	3
Didsbury ..	1	12	1	5	..	..	..	..	..	..	1	..	..	..	5
Gorton North ..	2	21	1	10	1	..	1	1	..	..	..	..	1	1	5
Gorton South ..	2	22	..	7	1	..	1	1	1	..	..	..	..	..	11
Harpurhey ..	2	21	2	5	3	..	..	..	..	..	1	..	..	1	9
Levenshulme ..	1	10	..	4	1	..	1	..	..	..	1	..	..	..	3
Longsight ..	1	15	2	4	1	..	1	1	..	1	1	..	..	..	4
Medlock Street..	2	41	6	13	1	..	9	1	..	..	1	..	1	..	9
Miles Platting ..	2	30	9	4	..	..	5	..	..	1	..	..	2	..	9
Moston ..	1	23	1	7	3	1	1	2	..	..	..	..	..	..	8
Moss Side East ..	2	21	4	6	1	..	1	..	..	..	..	1	2	1	5
Moss Side West ..	1	12	1	4	..	1	..	..	..	..	..	..	1	..	5
New Cross..	3	36	8	7	2	4	4	..	1	..	1	..	5	..	4
Newton Heath ..	2	23	5	7	..	1	2	..	..	..	..	1	..	..	7
Openshaw ..	1	25	3	8	2	1	1	2	..	..	..	..	1	..	7
Rusholme ..	1	12	2	2	..	..	2	2	1	..	..	..	..	..	3
St. Clement's ..	1	8	2	3	..	..	1	..	..	..	..	..	..	..	2
St. George's ..	2	35	10	9	3	..	2	..	..	1	..	..	..	2	7
St. John's ..	1	8	1	4	..	..	1	1	..	..	1	..	..	..	..
St. Luke's ..	3	49	13	12	1	..	5	1	..	1	1	..	..	3	12
St. Mark's ..	2	21	3	5	1	..	1	1	1	1	1	..	..	..	8
St. Michael's ..	2	28	4	7	2	..	3	2	..	..	1	..	..	1	7
Withington ..	3	30	5	6	1	..	3	2	..	..	..	1	..	3	9
Wythenshawe ..	3	40	6	11	2	1	6	..	2	..	..	..	1	..	11
Total ..	60	804	132	238	37	15	72	31	6	5	19	4	16	18	211

* A portion of Collegiate is worked by the Health Visitor appointed to visit the Jewish Poor.

WARD	CAUSES OF DEATH—CHILDREN ONE TO TWO YEARS										Number of deaths among children 1 to 2 years of age	Number of health visitors working in the district										
	Bronchitis and Pneumonia	Debility and Marasmus	Enteritis	Convulsions	Tuberculosis	Syphilis	Accidental Deaths	Influenza	Measles	Whooping Cough													Other Causes
All Saints	3	1	1	1	1	1	1	1	1	1	2	2	51	16	26							
Ardwick	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Beswick	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Blackley	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Bradford	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Cheetham	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Chorlton-cum-Hardy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
*Collegiate	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Collyhurst	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Crumpsall	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Didsbury	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Gorton North	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Gorton South	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Harpurhey	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Levenshulme	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Longsight	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Medlock Street	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Miles Platting	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Moston	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Moss Side East	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Moss Side West	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
New Cross	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1							
Newton Heath	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Openshaw	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Rusholme	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
St. Clement's	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
St. George's	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
St. John's	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
St. Luke's	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
St. Mark's	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
St. Michael's	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Withington	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Wythenshawe	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Total	52	166	60	3	7	1	2	4	51	16	26											

WARD	Number of health visitors working in the district	Number of deaths among children 2 to 5 years of age	Number of deaths								Accidental Deaths	Influenza	Measles	Whooping Cough	Other Causes
			Bronchitis and Pneumonia	Debility and Marasmus	Enteritis	Convulsions	Tuberculosis	Syphilis							
All Saints	2	10	3	..	..	..	..	1	..	..	..	3	..	3	3
Ardwick	2	13	3	..	..	..	..	2	1	..	..	2	1	4	4
Beswick	2	6	4	..	..	..	..	1	..	..	..	..	..	1	1
Blackley	1	7	2	..	..	..	..	..	..	..	..	..	..	2	2
Bradford	3	2	2	..	..	..	..	..	..	..	..	..	..	..	..
Cheetham	2	4	..	..	1	..	..	..	..	..	..	..	..	..	..
Chorlton-cum-Hardy	2	7	2	..	..	..	..	1	..	..	..	..	..	1	3
*Collegiate	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Collyhurst	2	3	..	..	..	..	..	..	..	..	..	..	1	..	1
Crumpsall	1	5	..	..	..	..	..	1	..	..	..	..	2	..	2
Didsbury	1	7	2	..	..	..	..	..	..	..	..	..	..	..	5
Gorton North	2	3	1	..	..	..	..	..	..	..	..	..	..	..	2
Gorton South	2	2	..	..	..	..	..	..	..	..	..	..	..	..	2
Harpurhey	2	2	..	..	..	..	..	..	..	..	..	..	..	..	2
Levenshulme..	1	4	1	..	..	..	..	..	..	..	..	..	..	..	2
Longsight	1	2	..	..	..	..	..	..	..	..	..	1	..	..	2
Medlock Street	2	5	..	..	..	..	..	..	..	..	..	2	..	..	2
Miles Platting	2	11	2	..	..	1	..	..	..	..	..	3	1	4	4
Moston	1	3	2	..	..	..	..	..	..	..	..	..	..	..	..
Moss Side East	2	8	2	..	..	..	..	..	..	..	..	..	1	2	2
Moss Side West	1	2	..	..	..	..	..	..	2	..	..	..	..	1	1
New Cross ..	3	10	2	..	..	..	..	1	..	..	2	1	1	2	2
Newton Heath	2	6	..	..	..	..	..	..	..	..	..	..	..	..	4
Openshaw ..	1	2	2	..	..	..	..	..	..	..	..	..	..	..	..
Rusholme ..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Clement's	1	2	..	..	..	..	..	..	..	..	..	1	..	1	1
St. George's ..	2	10	3	..	..	..	..	..	..	..	..	1	..	3	3
St. John's ..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Luke's ..	3	12	1	..	..	..	..	1	..	..	..	8	..	1	1
St. Mark's ..	2	4	2	..	..	..	..	..	1	..	..	..	..	2	2
St. Michael's..	2	4	..	..	..	..	..	..	..	..	..	1	..	1	..
Withington ..	3	4	1	..	..	..	..	..	..	..	..	1	1	..	..
Wythenshawe	3	6	1	..	..	..	..	1	1	..	..	..	..	3	3
Total	60	172	38	..	2	2	13	..	14	2	27	10	64		

* A portion of Collegiate is worked by the Health Visitor appointed to visit the Jewish Poor.

INFLUENZA.

The following figures relating to influenza, which cover the whole year, are the result of the health visitors' investigations.

There was no epidemic, and the incidence remained slight as in 1934, when 314 cases were discovered, compared with 1,605 in 1933.

Influenza is not notifiable, but 382 cases came to the notice of the department by various channels throughout the year, and 377 cases, occurring in 297 homes, were investigated ; to these the health visitors paid 564 visits.

The distribution according to sex of the 377 cases investigated was as follows :—

	<i>Males.</i>	<i>Females.</i>	<i>Totals.</i>
Cases	164	213	377
Deaths	37	48	85

The case fatality rate for influenza uncomplicated by pneumonia was 22·5 per cent., but as all cases did not come to our knowledge this figure does not represent the true rate.

In addition to the above figures 351 cases of influenzal pneumonia were notified, and 24 discovered through the death returns ; thus the total known cases of influenza for the year was 757 as compared with 314 in 1934.

The distribution according to sex and age on the total figures in the investigated cases is, therefore :—

INFLUENZA—SEX AND AGE GROUPS (Investigated Cases).

	<i>Males.</i>	<i>Females.</i>	<i>Totals.</i>
Cases	357	389	746
Deaths	108	108	216

	<i>Age Group.</i>		<i>Males.</i>	<i>Females.</i>
Under 1 year			2	2
1 to 4 years			39	39
5 „ 9 „			16	20
10 „ 14 „			7	13
15 „ 19 „			4	4
20 „ 24 „			3	17
25 „ 34 „			27	35
35 „ 44 „			26	39
45 „ 54 „			14	14
55 „ 64 „			13	11
65 „ 74 „			8	6
75 +			5	13
Totals ..			<u>164</u>	<u>213</u>

INFLUENZAL PNEUMONIA—SEX AND AGE GROUPS (Investigated Cases).

<i>Age Group.</i>	<i>Males.</i>	<i>Females.</i>
Under 1 year	2	3
1 to 4 years	18	12
5 „ 9 „	8	13
10 „ 14 „	9	7
15 „ 19 „	8	10
20 „ 24 „	14	9
25 „ 34 „	34	26
35 „ 44 „	32	26
45 „ 54 „	32	19
55 „ 64 „	22	24
65 „ 74 „	11	19
75 +	3	8
Totals ..	<u>193</u>	<u>176</u>

The total number of known cases during the year is too small to enable significant figures of distribution over the city districts to be available although there is again an indication that influenzal pneumonia was more prevalent in the northern half of the city.

PNEUMONIA.

During 1935 the following notifications were received in respect of pneumonia :—

Primary pneumonia	Lobar	1,215	
	Lobular	573	
	Unclassified	4	
		<u>1,792</u>	
Influenzal pneumonia	.. .. .	351	
Secondary pneumonia	.. .. .	182	
		<u>2,325</u>	
	Total		

The total for the preceding year was 1,781.

In addition to the above, however, 353 deaths from pneumonia—328 primary, 24 influenzal, and 1 secondary—all being un-notified cases, were brought to our notice through the death returns; thus the total number of known pneumonia cases for the year was 2,778, as compared with 2,141 for the previous year.

PRIMARY PNEUMONIA.

Of the 2,120 known cases of primary pneumonia 1,296 were classified as lobar pneumonia, 809 as lobular pneumonia, and 15 simply as pneumonia. The number of cases which were investigated was 2,039, and of these the case-fatality was 31·5 per cent. for lobar pneumonia, and 49·2 per cent. for lobular pneumonia, as compared with 30·5 per cent. for lobar pneumonia and 44·7 per cent. for lobular pneumonia in 1934.

INFLUENZAL PNEUMONIA.

351 cases were notified during 1935. This is a slightly higher figure than 1934, when 195 cases were notified. Certain other cases came to our notice and, in all, 369 cases were investigated, of which 133 proved fatal.

The case fatality rate was 36·04 per cent., and varied very little for either sex.

The distribution according to sex of these investigated cases of influenzal pneumonia is as follows:—

	<i>Males.</i>	<i>Females.</i>	<i>Totals.</i>
Cases	193	176	369
Deaths	71	62	133

SECONDARY PNEUMONIA.

Secondary pneumonia is not notifiable, but the attention of the department has been directed to 183 cases during the year. Of these 181 were investigated and were associated with the following diseases:—

Measles	143 cases
German measles	2 „
Whooping cough	34 „
Measles and whooping cough	1 case
Chickenpox	1 „
	<hr/>
	181 cases

The case fatality rate was 28·7 per cent., a decrease on the rate for the previous year, when it was 35·3 per cent. With 20 exceptions the patients were all children under five years of age.

A table showing the number of known cases of pneumonia, together with the number investigated, is attached.

In connection with all forms of pneumonia the health visitors paid 5,186 visits.

Investigation was attempted in each notified case, but in 89 instances it was difficult to obtain any definite information. These cases were, therefore, written off as “uninvestigated.”

1,470 cases were transferred to hospital, and of those nursed at home 250 were attended by a nurse supplied by the District Nursing Association.

Assistance in the form of milk was allowed in 82 necessitous cases, the total amount of milk granted being 1,209 pints.

TABLE SHOWING THE NUMBER OF PRIMARY, INFLUENZAL, AND SECONDARY PNEUMONIA CASES WHICH HAVE COME TO THE KNOWLEDGE OF THE PUBLIC HEALTH DEPARTMENT DURING 1935.

THE TABLE ALSO SHOWS THE NUMBER OF NOTIFIED CASES, THE NUMBER OF CASES FULLY INVESTIGATED, AND THE TOTAL NUMBER OF KNOWN CASES.

	Notified Cases	Cases fully investigated	Cases not fully investigated	Total known Cases of Primary, Influenzal, and Secondary Pneumonia occurring in 1934
(a) <i>Primary Pneumonia</i> —				
Notified Cases	1,792 } 2,120 {	1,741 } 2,039 {	51 } 81	Primary 2,120
Unnotified Cases (from Death Returns)	328 }	298 }	30 }	
(b) <i>Influenzal Pneumonia</i> —				
Notified Cases	351 } 375 {	346 } 369 {	5 } 6	Influenzal 375
Unnotified Cases (from Death Returns)	24 }	23 }	1 }	2,678
(c) <i>Secondary Pneumonia</i> —				
Notified Cases	182 } 183 {	180 } 181 {	2 } 2	Secondary 183
Unnotified Cases (from Death Returns).. ..	1 }	1 }		
Totals	2,678	2,589	89	

THE VENEREAL DISEASES SCHEME.

The Venereal Diseases Scheme, which was initiated in 1916, has from time to time been developed, and under it a large volume of useful work is being done.

There are in the City six main centres situated respectively at the Manchester Royal Infirmary, St. Luke's Hospital, Ancoats Hospital, St. Mary's Hospital for Women and Children, Manchester and Salford Hospital for Skin Diseases, and the Manchester Royal Eye Hospital. It will be noted that the Manchester Royal Eye Hospital appears for the first time in this report. A clinic for the treatment of persons suffering from eye affections due to syphilis has for many years been held at this hospital, but it was only in October, 1935, that the clinic was formally included in the venereal disease scheme.

In addition to these main centres, clinics are held weekly at two of the Maternity and Child Welfare Centres, and there is an auxiliary centre in the grounds of Monsall Hospital for the intermediate treatment of women who are referred there from the hospitals or by their own doctor. There are also two venereal disease wards in Crumpsall Hospital which, although not strictly within the scheme, afford useful accommodation for in-patient treatment.

The extent and nature of the work done is shown in the tables at the end of this statement. It will be seen that during the year 867 persons suffering from syphilis and 1,348 from gonorrhœa presented themselves for treatment for the first time. The increase from 849 new syphilis cases in 1934 to 867 in 1935 is more than accounted for by 160 cases treated at the Royal Eye Hospital during the last quarter of the year, which are now included in the statistical records.

The trend of new cases of syphilis continues downwards and, in addition to the decline in numbers, it is the opinion of those engaged in the work that the clinical manifestations of the disease are less severe than they were formerly. Although it is difficult to provide an explanation of this feature it is a matter for some satisfaction.

Of the 867 persons suffering from syphilis who are recorded as having attended for the first time, 206 were congenital cases, of which 160 were under treatment at the Royal Eye Hospital. Of 661 acquired cases, 141, or 21 per cent., were in the primary stage; 137, or 21 per cent., in the secondary; and 383, or 58 per cent., in the later stages. These figures cannot be considered altogether satisfactory. At the same time the fact that 1,331 persons attended who, on examination, were found not to be suffering from venereal disease indicates a general desire for early diagnosis and treatment on the part of persons who possibly have exposed themselves to infection.

As regards gonorrhœa, the number of new cases during the year was a little higher, both in males and females, than in the previous year. This is not to be regretted, as it is certain that many persons, especially females, neglect to seek treatment for this complaint, and the increased attendance does not necessarily imply increasing incidence.

The question of obtaining closer co-operation between Crumpsall Hospital and the Maternity and Child Welfare clinics has engaged the attention of the Public Health Committee, and they have now authorised the appointment of a consultant surgeon experienced in the treatment of venereal disease, who will supervise the treatment and form a link between the hospital and the clinics to which women are referred upon their discharge from hospital.

FINANCE.

A statement prepared by the City Treasurer shows that the total net expenditure on the scheme for the year 1935 was as follows:—

A.—Apportionable Expenditure.

	£
Manchester University, Department of Pathology	391
Ancoats Hospital	2,627
Manchester and Salford Hospital for Skin Diseases	1,242
St. Luke's Hospital	4,360
Manchester Royal Infirmary	3,709
St. Mary's Hospital	1,023
Manchester Royal Eye Hospital	155
Approved arsenobenzene compounds issued by the Medical Officer of Health	342
Auxiliary centre for females	512
	<hr/>
	<u>£14,361</u>

B.—Non-apportionable Expenditure.

	£
Treatment of Manchester patients by other local authorities	2,550
Maternity and child welfare centres	330
Publicity	34
Printing, stationery, and advertising	45
Administration expenses	386
	<hr/>
	<u>£3,345</u>
Total expenditure for the year	<u>£17,706</u>

The total cost per attendance is 3s. 10·15d., an increase of approximately 3½d. on last year's figure of 3s. 6·87d. Comparing the six hospitals, the highest cost per attendance is at Ancoats (4s. 5·38d.) and the lowest at the Manchester Royal Eye Hospital (2s. 5·74d.). If intermediate treatments are included in the calculation the cost per attendance works out at approximately 2s. 6d.

No action under the Venereal Disease Act, 1917, has been taken during the year. This Act relates mainly to the treatment of persons suffering from venereal disease by unqualified practitioners.

TABLE I.
SYPHILIS.

TOTAL NUMBER OF PERSONS ATTENDING MANCHESTER CLINICS SUFFERING FROM SYPHILIS AND AVERAGE NUMBER OF ATTENDANCES PER INDIVIDUAL, 1924-1935.

Years	Number of Patients	Number of Attendances	Average Number of Attendances per Patient
1924-28 (average per annum)	3,523	29,131	8·3
1929	3,634	33,829	9·3
1930	3,484	37,493	10·8
1931	3,021	38,105	12·6
1932	2,645	46,601	17·6
1933	2,603	47,175	18·1
1934	2,494	44,186	17·7
1935	2,586	39,490	15·3

TABLE 2.
GONORRHŒA.
TOTAL NUMBER OF PERSONS ATTENDING MANCHESTER CLINICS SUFFERING
FROM GONORRHŒA AND AVERAGE NUMBER OF ATTENDANCES
PER PATIENT, 1924-1935.

Years	Number of Patients	Number of Attendances	Average Number of Attendances per Patient
1924-28 (average per annum)	3,485	36,721	10·5
1929	3,822	48,045	12·6
1930	3,626	56,578	15·6
1931	3,465	58,979	17·0
1932	2,847	76,544	26·7
1933	2,769	76,517	27·6
1934	2,772	76,723	27·7
1935	2,722	84,753	31·1

TABLE 3.
SHOWING TOTAL NUMBER OF ATTENDANCES AT THE MANCHESTER CLINICS,
1919-1935.

Year	Number of Attendances	Year	Number of Attendances
1920	60,454	1928	85,694
1921	59,549	1929	88,514
1922	66,386	1930	101,157
1923	70,237	1931	103,814
1924	65,256	1932	128,768
1925	67,569	1933	129,629
1926	67,393	1934	127,755
1927	75,581	1935	131,660

TABLE A.
GENERAL SUMMARY OF THE WORK DONE AT ALL THE CENTRES DURING 1935.

	Syphilis		Soft Chancere		Gonorrhœa		Conditions other than Venereal		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
1. Number of cases on 1st January, 1935, under treatment or observation	860	610	6	...	880	267	118	86	1864	963	2827
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	75	45	...	...	48	43	...	4	123	112	235
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from	463	404	82	...	1067	281	777	554	2389	1239	3628
4. Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection.	66	43	...	...	110	26	1	...	177	69	246
Totals of Items 1, 2, 3, and 4.	1464	1122	88	...	2105	617	895	644	4552	2383	6935
5. Number of cases discharged after completion of treatment and final tests of cure	169	78	55	...	497	83	782	527	1503	688	2191
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from	269	224	20	...	340	172	...	...	629	396	1025
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	102	47	2	...	180	51	...	...	284	98	382
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	104	75	1	...	187	49	...	...	292	124	416
9. Number of cases remaining under treatment or observation on 31st December, 1935	820	698	10	...	901	262	113	117	1844	1077	2921
Totals of Items 5, 6, 7, 8, and 9 (These Totals should agree with those of Items 1, 2, 3, and 4)	1464	1122	88	...	2105	617	895	644	4552	2383	6935
10. Number of cases included in Item 6 which failed to complete one course of treatment..	68	65	...	...	...	...	...	...	68	65	133
11. Number of attendances:— (a) for individual attention of the medical officers	23155	15509	212	...	16851	7010	2360	1718	42578	24237	66815
(b) for intermediate treatment, e.g., irrigation, dressing	826	...	3045	...	51759	9133	...	82	55630	9215	64845
Total Attendances	23981	15509	3257	...	68610	16143	2360	1800	98208	33452	131660
12. In-patients:— (a) Total number of persons admitted for treatment during the year	23	12	1	...	24	15	1	...	49	27	76
(b) Aggregate number of "in-patient days" of treatment given	633	272	8	...	455	573	7	...	1103	845	1948
	Under 1 year		1 and under 5 years		5 and under 15 years		15 years and over		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods	8	9	3	4	25	33	43	81	79	127	206

TABLE B.—SHOWING THE WORK DONE AT SIX VENEREAL DISEASE CLINICS AND AT TWO CHILD WELFARE CENTRES DURING 1935.

PARTICULARS	MANCHESTER ROYAL INFIRMARY				ANCOATS HOSPITAL				HOSPITAL FOR SKIN DISEASES				ST. LUKE'S HOSPITAL				ST. MARY'S HOSPITAL				MANCHESTER ROYAL EYE HOSPITAL†				CHILD WELFARE CENTRE, HIGHER ARDWICK				CHILD WELFARE CENTRE, LOWER MOSS LANE				TOTALS FOR THE YEAR				GRAND TOTALS—ALL AREAS (Compared with corresponding figures for 1934)					
	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.*	Not V.D.	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.	Not V.D.	Sy.	S.C.	G.	Not V.D.	1935	1934								
New Cases	290	..	458	405	124	45	289	270	140	..	32	124	87	37	493	179	39	..	71	190	160	..	..	..	18	..	3	105	9	..	6	60	867	82	1348	1331	3628	3505	
Total cases treated	1080	..	786	504	265	45	469	290	433	..	32	124	350	43	1221	190	185	..	194	249	160	..	..	..	82	..	6	117	31	..	14	65	2586	88	2722	1539	6935	6854	
Cases discharged after completion of treatment	124	..	231	441	32	28	135	239	30	..	..	124	42	27	187	151	13	..	27	187	..	..	..	..	4	..	..	111	2	..	..	56	247	55	580	1309	2191	2283
Cases ceasing to attend Clinic— (A) Before completion of treatment	197	..	128	..	53	13	69	..	100	..	..	..	89	7	241	..	41	..	70	..	..	..	..	..	1	..	..	..	12	..	4	..	493	20	512	..	1025	910
(B) After completion of treatment, but before final tests as to cure	32	..	35	..	46	..	58	..	29	..	..	..	40	2	138	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	149	2	231	..	382	488	
(C) Transferred to other Treatment Clinics	48	..	104	..	12	..	28	..	54	..	32	..	25	1	69	..	2	..	1	..	30	..	..	..	6	..	..	..	2	..	2	..	179	1	236	..	416	346
Attendances at the Out-patient Clinic	18476	..	6577	1429	6812	101	4226	673	5360	..	32	219	4234	111	11455	526	1698	..	1451	706	871	..	..	..	996	..	33	262	217	..	87	264	38664	212	23861	4078	66815	70859	
Intermediate treatment	514	..	18237	..	12	..	11728	..	..	..	..	..	300	3045	27303	..	..	..	356	82	..	..	..	..	..	..	..	..	..	..	..	826	3045	608921	82	64845	56896	
In-patient Days	23	..	..	..	..	..	..	..	144	..	..	..	586	8	1028	7	..	..	..	..	152	..	..	..	..	..	..	..	..	..	..	905	8	1028	7	1948	2754	
Doses of approved arsenobenzene compounds given	3811	..	..	..	1921	..	..	..	971	..	..	..	1120	..	..	..	422	..	..	..	369	..	..	..	572	..	..	..	118	..	..	..	..	..	..	..	9304	10760
Pathological Examinations made— A. (Centre)	Wass. 88	Spir. 1945	Gon. 1945	Other Organisms	Wass. 88	Spir. 1945	Gon. 1945	Other Organisms	Wass. 88	Spir. 1945	Gon. 1945	Other Organisms	Wass. 88	Spir. 1945	Gon. 1945	Other Organisms	Wass. 88	Spir. 1945	Gon. 1945	Other Organisms	Wass. 88	Spir. 1945	Gon. 1945	Other Organisms	Wass. 88	Spir. 1945	Gon. 1945	Other Organisms	Wass. 88	Spir. 1945	Gon. 1945	Other Organisms	Wass. 88	Spir. 1945	Gon. 1945	Other Organisms	Wass. 88	Spir. 1945	Gon. 1945	Other Organisms		
B. (Approved Laboratories)	1812	964	4	1002	..	751	655	1	320	192	209	..	57	..	60	..	45	..	4963	4	1104	1	4963	115	8060	5135	138	7102

* Gonorrhoea cases transferred to other centres.

† Includes 3268 attendances made by patients at Monsall Auxiliary Centre for Females.

‡ Figures from 9th October, 1935, only.

TABLE C.—WORK DONE IN THE VENEREAL DEPARTMENT,
CRUMPSALL HOSPITAL, DURING 1935.

TOTAL ADMISSIONS.

	Syphilis	Soft Chancre	Gonorrhœa	Conditions other than Venereal	Total
Males	24	..	71	32	127
Females ..	62	..	48	27	137
	86	..	119	59	264

There were 18 normal births in this department of the hospital during the year. Six stillbirths occurred. 25 babies were born or admitted without any signs of specific disease and with negative Wassermanns, and one was syphilitic at birth.

Two babies died, aged one day. The cause of death in each case was prematurity. The average length of time under treatment was 33 days.

Persons Treated with Approved Arsenobenzene Compounds.

Males	18
Females	44
	—
Total	62
	—

Number of injections of approved arsenobenzene compounds 267

Pathological Examinations.

WASSERMANN REACTION				GONOCOCCI				SPIROCHÆTES			
Positive	Negative	Doubtful	Total Examined	Positive	Negative	Doubtful	Total Examined	Positive	Negative	Doubtful	Total Examined
71	164	27	267	56	233	1	290	..	..	..	.

TABLE D.—AUXILIARY CENTRE FOR FEMALES AT MONSALL HOSPITAL.
SHOWING NUMBER OF PERSONS TREATED AT THE CENTRE DURING 1935.

PARTICULARS	Gonorrhœa	Syphilis and Gonorrhœa	Not V.D.	Total
1. Number of females who on 1st January, 1935, were under treatment for	39	..	..	39
2. Number of new patients who attended during the year for the first time— (a) Name of Clinic from which patient came— Ancoats Hospital	53	..	..	53
Manchester Royal Infirmary.. .. .	18	..	..	18
Higher Ardwick C.W. Centre	3	..	..	3
(b) Cases referred to the Centre by Medical Practitioners	13	..	..	13
3. Old patients who have returned for treatment after discontinuing attendance for some time— (a) From Clinics— Ancoats Hospital	20	..	..	20
Manchester Royal Infirmary.. .. .	6	..	..	6
(b) Cases referred by Medical Practitioners.	..	..	..	..
Total item 2 (new patients)	87	..	..	87
Total items 1, 2, and 3—Total patients attending during 1935	152	..	..	152
4. Cases discharged cured :— (a) Ancoats Hospital	49	..	..	49
Manchester Royal Infirmary.. .. .	16	..	..	16
Higher Ardwick C.W. Centre	1	..	..	1
(b) Medical Practitioners' Cases	9	..	..	9
Total item 4.—Cases discharged cured	75	..	..	75
5. Discontinued attendance	41	..	..	41
6. Transferred to other Clinics .. .. .	..	..	..	..
7. Number of patients still attending on Jan. 1st, 1936	36	..	..	36

The number of new patients was 87, which compares with 71 in the previous year and 76 in 1933. Over half the cases came from Ancoats Hospital.

The total number of attendances was 3,268, an average of 21·5 per person, there being 32 patients who attended on more than 30 occasions.

180 Sitz baths were given during the year.

PATHOLOGICAL WORK DONE DURING 1935.

	SYPHILIS				GONORRHOEA							
	WASSERMANN REACTION				SPIROCHÆTES				MICROSCOPICAL EXAMINATION			
	Positive	Negative	Doubtful	Total Examined	Positive	Negative	Doubtful	Total Examined	Positive	Negative	Doubtful	Total Examined
A. Work done at the Public Health Laboratory (University Bacteriological Department):—												
Manchester Royal Infirmary	491	864	462	1,817	..	..	..	..	..	..	..	..
St. Luke's Hospital	87	508	81	676	..	..	..	..	..	..	..	..
Ancoats Hospital	7	8	4	19	..	..	..	..	..	..	..	..
Hospital for Skin Diseases	251	375	120	746	..	..	..	..	..	..	..	..
St. Mary's Hospital	35	237	55	327	..	..	..	..	..	1	..	1
Two Maternity and Child Welfare Centres	51	180	36	267	..	..	..	103	9	94	..	..
Non-approved Institutions	91	760	28	879	..	..	..	63	8	55	..	12
Medical Practitioners	185	833	113	1,131	..	8	..	363	84	279	..	54
Total work done at Public Health Laboratory	1,198	3,765	899	5,862	..	8	..	529	101	428	..	67
B. Work done by Hospital Pathologist:—												
Ancoats Hospital	356	537	71	964	..	4	..	4	114	834	54	1,002
Manchester Royal Eye Hospital	147	25	20	192	..	..	..	..	..	..	..	..
C. Work done by Clinical Pathologist at Clinics:—												
Manchester Royal Infirmary .. .. .	..	..	..	..	37	51	..	88	436	1,509	..	1,945
St. Luke's Hospital .. .. .	..	..	..	..	11	11	..	22	396	4,102	34	4,532
St. Mary's Hospital .. .. .	..	..	..	..	..	1	..	1	27	432	20	479
Total of A, B, and C	1,701	4,327	990	7,018	48	75	..	123	1,074	7,305	108	8,487
									32	35	..	67

WELFARE OF THE BLIND.

Blind persons over the age of sixteen are dealt with by the Blind Persons Welfare Committee.

The routine certification of blind persons is carried out by Dr. H. V. White, and the functions of referee by Dr. H. H. McNabb, both of whom are ophthalmic surgeons in practice in the city.

Financial assistance is granted to necessitous blind persons who are registered as being ordinarily resident within the city. The grants awarded are taken to the homes of the people by the home teachers of the Manchester and Salford Blind Aid Society, who also teach the Braille and Moon methods. The Blind Aid Society also assist them with pastime occupations and look after their comfort and welfare generally. The average number of visits made per month is 2,100.

The technical training of young persons and the employment of blind persons who are not incapable of work are provided for at Henshaw's Institution for the Blind, Old Trafford, and in the spacious and up-to-date workshops in Warwick Road, Old Trafford. Brushes, baskets, mats, knitwear, boot and shoe making and repairing, mattresses, and furniture, etc., are made in the workshops and there is a sales shop in the city (129 Oxford Road).

The following are the numbers of workers engaged in the workshops, also the numbers resident in the home and hostel for whom the City Council pay grants :—

Workshop employees—							
Men	..	..	..	..	..	..	103
Women	..	..	..	..	..	..	28
Total							131
Residents in Home—							
Men	..	..	..	..	..	..	10
Women	..	..	..	..	..	..	4
Total							14
Residents in Hostel—							
Men	..	..	..	..	..	..	2

Homeworkers are dealt with by Henshaw's Institution, under an approved scheme, and homeworkers as well as workshop employees receive substantial augmentation of earnings, also other charitable grants.

Homes for the aged men and women and those incapable of work are provided by the two voluntary agencies, as follows :—

One home at Rhyl	For men only	} Provided by Henshaw's Institution
One home at Old Trafford..	For aged men and women	

One home at Southport .. Residents of both sexes who are boarded out in the summer months when it is used as a holiday home for blind people } Provided by the Manchester and Salford Blind Aid Society

Four homes at Pendleton.. For aged men and women }

One hostel at Old Trafford.. For trainees over 21 years is also provided by Henshaw's Institution.

They are situated in spacious grounds with healthy surroundings and the occupants receive every comfort and kindness.

During the year 116 new cases of blindness have been registered ; 92 of these were over 50 years of age.

With reference to the fall in infantile blindness it is most encouraging to observe that, on examination of the register, it is found that out of a total of 1,265 cases, the number of blind children under 16 years of age is only 33, of whom four are infants under the age of five years.*

The following analysis and summary of the register for the 12 months ended 31st March, 1936, also the classification of patients and causes of blindness are interesting :—

MANCHESTER AND SALFORD BLIND AID SOCIETY.
CITY OF MANCHESTER.
Analysis of Register.

Children under 5 years of age	4
Children of school age (5 to 16 years)	25
Under training	36
No training but trainable	0
Trained but unemployed	3
Employed	219
Unemployable	978
	<hr/> 1,265

Summary of Register of Blind Persons.

	TWELVE MONTHS ENDING 31/3/36	TWELVE MONTHS ENDING 31/3/35
Number of cases on the register at 31/3/35	1,252	at 31/3/34 1,207
ADD—		
Number of new cases	116	100
Cases re-certified by Referee Service	9	0
Removals into area, i.e.—		
Cases at Henshaw's Institution, etc.	12	11
Non-grant cases	9	15
Grant cases	5	21
	<hr/> 26	<hr/> 47
	1,403	1,354
DEDUCT—		
Number of deaths	94	67
Removals out of area, i.e.—		
Cases at Henshaw's Institution, etc.	7	3
Non-grant cases	9	13
Grant cases	9	11
	<hr/> 25	<hr/> 27
Number of cases de-certified	19	8
	<hr/> 1,265	<hr/> 1,252
Number of cases on the register at 31/3/36		at 31/3/35
	Males 612	Males 601
	Females 653	Females 651

* In this connection reference should be made by readers to the reports on ophthalmia neonatorum and on the treatment of venereal diseases on pages 287 to 294 and 340 to 347.

MANCHESTER BLIND AID SOCIETY.
CITY OF MANCHESTER.

Classification of new cases of blindness certified and registered from
1st April, 1935, to 31st March, 1936 :—

												Males	Females	Total
New cases from 1/4/35 to 31/3/36												54	62	116
Number of deaths during the 12 months												41	53	94
AGE AT WHICH BLINDNESS OCCURRED—														
Age period														
0—1												2	1	3
1—5 .. .. .												..	1	1
5—10												1	..	1
10—20												1	1	2
20—30												3	1	4
30—40 .. .. .												..	3	3
40—50												6	5	11
50—60												9	4	13
60—70												13	20	33
70—80												11	18	29
Over 80												7	8	15
Unknown												1	..	1
												54	62	116
Single												15	16	31
Widows .. .. .												..	32	32
Married and separated												2	..	2
Widowers												16	..	16
Married												21	14	35
												54	62	116
PHYSICALLY AND MENTALLY DEFECTIVE—														
Deaf												2	6	8
Physical												4	7	11
Deaf and physical .. .. .												..	1	1
Mental												2	1	3
Mental and physical .. .. .												..	1	1
												8	16	24
CAUSES OF BLINDNESS—														
Sections														
Sub-sections														
A. Congenital and														
Undetermined Cases														
1 Congenital, hereditary, and developmental defects												5	5	10
2 Myopic error												2	4	6
4 Glaucoma, primary												6	9	15
5 Cataract, primary												15	31	46
6 Other primary ocular defects, e.g., primary detachment of														
retina												1	..	1
B. Infectious and														
Bacterial														
3 Syphilis (a) Congenital .. .. .												..	1	1
(b) Acquired												4	..	4
4 Trachoma												1	..	1
6 Specific fevers, e.g., small-pox, measles, scarlet diphtheria ..												..	2	2
12 Other infectious and bacterial diseases												1	..	1
C. Traumatic and														
Chemical														
1 Industrial (a) Trauma												2	..	2
2 Non-industrial (a) Trauma .. .. .												..	1	1
D. General Diseases														
2 Vascular diseases, including cerebral vascular lesions ..												1	..	1
6 Diabetes												3	2	5
7 Nephritis .. .. .												..	1	1
E. No information obtainable												13	6	19
												54	62	116

Further 106 cases were examined but found not to be blind within the meaning of the Blind Persons Act, 1920, including 4 removals into the area and 12 cases already on the register sent for further examination and de-certified.

REFEREE SERVICE.

Fifteen cases were submitted to the Referee Surgeon, with results as follows :—

Decision of Ophthalmic Surgeon upheld	5
Decision of Ophthalmic Surgeon reversed, i.e., not blind to blind	*10
	15

* Includes 1 case not previously registered as blind and therefore treated as a new case.

MANCHESTER AND SALFORD BLIND AID SOCIETY.

The following details are furnished to enable a comparison to be made to ascertain whether in view of the increased financial assistance given to blind people since 1st April, 1930, the period of life has been extended :—

Age at which death occurred	Number of deaths during 12 months ended 31/3/30	Number of deaths during 12 months ended 31/3/32	Number of deaths during 12 months ended 31/3/33	Number of deaths during 12 months ended 31/3/34	Number of deaths during 12 months ended 31/3/35	Number of deaths during 12 months ended 31/3/36
0—1	Nil	Nil	Nil	Nil	Nil	Nil
1—5	Nil	Nil	Nil	Nil	Nil	Nil
5—10.. .. .	1	Nil	1	Nil	Nil	Nil
10—20.. .. .	2	1	2	Nil	Nil	Nil
20—30.. .. .	Nil	3	1	2	Nil	Nil
30—40.. .. .	2	Nil	1	3	Nil	Nil
40—50.. .. .	7	6	1	4	1	6
50—60.. .. .	8	9	13	5	4	8
60—70.. .. .	17	18	19	18	21	17
70—80.. .. .	19	48	52	42	28	34
80—90.. .. .	9	25	20	18	11	29
Over 90	1	10	4	6	2	Nil
	66	120	114	98	67	94

PUBLIC HEALTH EDUCATION.

Lectures.

All the local guilds and organisations of various kinds are circulated from time to time to bring to their notice the lectures which are offered free of charge by the Public Health Committee.

The number of lectures given to such bodies was 112, as against 137 for the previous year. The cost of giving these lectures was approximately £110. One guinea, plus expenses, is paid for each lecture, except for those on venereal diseases, the fee for which is two guineas (including expenses). Thirty-six of the 112 lectures were given by members of the staff of this department who do not receive any fees.

Below is a statement showing how the 112 lectures were distributed :—

Co-operative Guilds—		
Women	31	
Men	4	
Mixed	6	
Church Organisations—		
Women's meetings	7	
Mixed	3	
Women Citizens' Association	11	
Elementary Day Schools	36	
District Nursing Association	2	
Boy Scout Troops	5	
Tot H Branches	4	
Other organisations	5	
Total		112

TITLES OF LECTURES AND NUMBER OF TIMES GIVEN.

Lecture	Number of Times Given	Number of Persons Attending
1. The Care of the Infant	2	100
2. Lectures to Boy Scouts desirous of obtaining the Public Health Badge.	3	120
3. The Expectant Mother	1	25
4. The Change of Life	6	270
5. Our Bodies and How we Live	2	55
6. Food and Drink: Their Use and Abuse	4	155
7. Venereal Diseases	3	85
8. Cancer	2	70
9. Diphtheria: Its Dangers and Prevention	36	2,030
10. Foods: Values and Prices	2	55
11. Prostitution: A Social Problem	1	30
12. Sunlight and Health	2	85
13. Smoke and Health	1	40
14. The Romance of Medical Science	4	135
15. Recent Advances in Medical Research	2	100
16. The Story of Preventive Medicine	2	100
17. The Problem of Sex Education	1	100
18. Health: How to Keep It	5	285
19. Health and Hygiene	5	200
20. Wise Middle Age	6	290
21. The Problem of Clean Milk	1	20
22. The Public Health Service	1	80
23. Laughter and Health	4	220
24. Seeing What Isn't There	1	20
25. The Fear of Disease	1	24
26. Habit Making and Breaking	3	155
27. Interest in Life: Keeping and Losing It	7	325
28. Hobbies and Health	3	150
29. The Curiosity of Children	1	25
Totals	112	5,349
Average .. .. .	.. .. .	48

"Better Health."

The following articles appeared in the journal "Better Health" during the year :—

1. "Precautions against Whooping Cough"—Circular issued by the Public Health Department.
2. "Influenza"—Dr. McClure.
3. "The Advance of Public Health in a Large City"—Mr. D. Egerton, Chief Clerk.
4. "The Care of the Tuberculous Child"—Dr. D. P. Sutherland.
5. "Training and Work of Health Visitors"—Miss J. M. Calder, Superintendent of Health Visitors.
6. "Food Poisoning"—Dr. McClure.
7. "Measles"—Circular issued by the Public Health Department.
8. "Beds and Bedding"—Mr. I. Priestley, Chief Sanitary Inspector.
9. "Scarlet Fever"—Dr. Marshall.
10. "National Rat Week"—Circular issued by the Public Health Department.
11. "Diet for the Toddler"—Mrs. A. B. Meering, Centre Superintendent.
12. "Diet for the Toddler" (Concluded)—Mrs. A. B. Meering, Centre Superintendent.

Ten thousand copies of "Better Health" are issued monthly. Distribution is effected through the public free libraries, the maternity and child welfare clinics, the tuberculosis clinic, Baguley Sanatorium, and by a number of large firms throughout the City. This journal proves a very efficient and inexpensive method of bringing health matters to the notice of the citizens.

AMBULANCE AND DISINFECTING STATION.

The station is open day and night for the removal of infectious disease cases and for the collection and disinfection of infected bedding.

Staff :—

Manager

Motor mechanic

3 Clerks

15 Ambulance officers

5 Disinfectors

9 Labourers

1 Cleansing nurse

1 Woman attendant

Ambulances :—

There is a fleet of seven ambulances in use for the removal of infectious disease cases, including tuberculosis. During the year under review the number of cases removed to hospital was 6,114. The mileage covered was 71,079.

Disinfection.

For the disinfection of bedding, clothing, etc., two steam disinfectors are installed at the station. For articles which cannot be subjected to steam, disinfection by formalin is carried out in a chamber built for the purpose. Three motor bedding vans are used for the removal of infected bedding, clothing, etc., and during the year 1935, 71,985 articles were removed. The mileage covered by the bedding vans was 36,826.

The following table shows the number and type of articles disinfected each month during the year :—

Month ending 1935	Blankets	Sheets	Pillow s	Bolsters	Quilts	Mattresses	Beds	Carpets	Articles of Clothing	Sundry Articles	Total
January ..	1 202	469	1,068	244	739	300	411	8	911	287	5,639
February ..	1,034	355	965	218	638	252	366	18	759	319	4,924
March ..	971	344	933	229	609	287	332	15	636	261	4,617
April	1,714	289	1,338	401	462	737	581	6	560	256	6,344
May	1,124	363	1,520	464	630	276	655	9	521	265	5,827
June	699	198	1,081	375	466	273	524	15	727	159	4,517
July	1,202	298	1,140	406	450	285	531	6	705	203	5,226
August ..	488	277	1,253	457	372	290	632	5	1,285	229	5,288
September	1,734	352	1,455	475	543	260	747	21	1,242	942	7,771
October ..	1,069	341	1,585	573	699	328	791	31	2,063	473	7,953
November..	1,178	395	1,406	465	745	293	657	6	2,229	601	7,975
December	958	289	1,133	372	588	272	506	13	1,385	388	5,904
	13,373	3,970	14,877	4,679	6,941	3,853	6,733	153	13,023	4,383	71,985

Steam Disinfector	69,170	Articles
Formic Aldelyde Chamber	567	Mattresses
“ “ “ “ “ “ “ “	2,248	Books
	<u>71,985</u>	Total

Disinfectors.

Three disinfectors are employed for fumigation of rooms, etc., in which cases of tuberculosis have occurred, and for general disinfection after cases of smallpox and typhus fever.

Garage.

The station garages the ambulances and bedding vans, and, in addition, three motor cars which are owned by the Public Health Committee.

NEW CLEANSING STATION.

The new cleansing station at Monsall Road, Newton Heath, was opened on June 10th, 1935, for the treatment of scabies, cleansing of persons from the clearance areas and verminous persons.

A cleansing nurse has been appointed to supervise the work at this cleansing station and is assisted by two attendants.

The following table shews the number of cases treated at the cleansing station since the station was opened :—

Month	Scabies (treatments)	Voluntary cleansings	Compulsory cleansings	Dis- infestation	Special cases	Totals
June	63	3	—	—	1	67
July	54	1	2	7	—	64
August	48	8	—	63	1	120
September	39	8	4	42	—	93
October	42	11	9	111	—	173
November	69	5	4	94	1	173
December	27	6	—	56	—	89
	342	42	19	373	3	779

REPORT OF THE SANITARY SECTION.

FOOD SUPERVISION.

Every effort has been made during the year to ensure that the food supplies of the City are maintained free from adulteration and contamination.

Prevention of Food Adulteration.

3,322 samples of food and drugs have been procured by the three sampling officers and submitted to the Public Analyst. 518 were informal and 2,804 were statutory samples.

108 different foods and drugs are represented in these samples, the majority being staple articles of diet.

Analysis revealed adulteration in 99 samples, or 2·98 per cent.

Considerable attention has been given to milk supplies. 1,401 samples of milk have been obtained, of which 75 samples, or 5·35 per cent., were adulterated. In the majority of cases the adulteration was slight.

The following statement indicates the extent of adulteration and enables comparisons to be made between the food supply of Manchester and the rest of the country :—

Year	Percentage of Samples Adulterated			
	Milk		All Food and Drugs	
	Manchester	Average for England	Manchester	Average for England
1931	4·77	6·4	2·71	4·6
1932	8·38	7·3	3·98	5·1
1933	7·98	7·7	4·41	5·5
1934	5·79	7·2	3·14	5·3
1935	5·35	—	2·98	—

The average composition of samples of milk obtainable in Manchester during the various monthly and quarterly periods during 1935 and particulars of the average composition annually during the past five years are given in the following table :—

TABLE I.
MILK SAMPLES—ANALYTICAL DATA.

Month	Number of Samples	Fatty Solids	Non-fatty Solids	Total Solids	Average for Quarter	Number of Samples	Fatty Solids	Non-fatty Solids	Total Solids
		Per cent.	Per cent.	Per cent.			Per cent.	Per cent.	Per cent.
January ..	110	3·43	8·90	12·33	FIRST QUARTER	390	3·39	8·89	12·28
February ..	121	3·38	8·89	12·27					
March	159	3·38	8·87	12·25					
April	109	3·40	8·88	12·28	SECOND QUARTER	340	3·38	8·93	12·31
May	119	3·43	8·96	12·28					
June	112	3·31	8·95	12·26					
July	113	3·48	8·92	12·40	THIRD QUARTER	327	3·53	8·89	12·42
August	88	3·53	8·84	12·37					
September ..	126	3·59	8·91	12·50					
October ..	120	3·69	9·05	12·74	FOURTH QUARTER	344	3·63	9·00	12·63
November ..	140	3·63	8·97	12·60					
December ..	84	3·57	8·98	12·55					
Average for the year 1935						1,401	3·48	8·93	12·41
„ „	1934	„ ..	„ ..	„ ..	„ ..	1,434	3·46	8·92	12·38
„ „	1933	„ ..	„ ..	„ ..	„ ..	1,378	3·47	8·87	12·34
„ „	1932	„ ..	„ ..	„ ..	„ ..	1,420	3·52	8·88	12·40
„ „	1931	„ ..	„ ..	„ ..	„ ..	1,382	3·59	8·90	12·49
Requirements of the Sale of Milk Regulations, 1901							3·00	8·50	11·50

Comparison of adulteration in milk samples taken on Sunday and on weekdays :—

	Number taken	Genuine	Adulterated	Percentage adulterated
Samples taken on Sunday	211	204	7	3·32
Samples taken on weekdays	1,190	1,122	68	5·71

840 samples of milk were procured for bacteriological examination by the sampling officers at railway stations and from vehicles entering the City by road.

Of the 99 samples of food and drugs found to be adulterated 65 were only slightly adulterated and the offenders were cautioned.

In 16 instances legal proceedings were instituted resulting in penalties and costs amounting to £44 9s. (for details, see Table II., pages 358 to 360).

The remaining samples were obtained informally, and the usual procedure of procuring a statutory sample was adopted forthwith.

TABLE II.

SHOWING THE PROCEEDINGS TAKEN UNDER THE PROVISIONS OF THE ADULTERATION OF FOOD AND DRUGS AND THE MARGARINE ACTS DURING THE YEAR 1935.

INFORMAL SAMPLES		ARTICLE	STATUTORY SAMPLES		PROSECUTIONS							
Number Obtained	Number Adulterated		Number Obtained	Number Adulterated	Referred to Town Clerk for legal proceedings	Number cautioned as the Adulteration was only slight	Number summoned before Magistrates	Number Fined	Number ordered to pay Costs only	Dismissed or Withdrawn	Amount of Fines Imposed	Amount of Costs ordered to be Paid
											£ s. d.	£ s. d.
5	..	Almonds, Ground	11	..	..	..	..	..	..	..	..	..
..	..	Apples	1	..	..	..	..	..	..	..	..	..
..	..	Arrowroot.....	3	..	..	..	..	..	..	..	..	..
9	..	Bacon and Ham.....	26	..	..	..	..	..	..	..	..	..
2	..	Baking Powder	16	..	..	..	..	..	..	..	..	..
..	..	Barley	29	..	..	..	..	..	..	..	..	..
1	..	Bicarbonate of Soda	17	..	..	..	..	..	..	..	..	..
..	..	Borax	11	..	..	..	..	..	..	..	..	..
4	..	Borax, Glycerine of	4	..	..	..	..	..	..	..	..	..
..	..	Boric Acid	14	..	..	..	..	..	..	..	..	..
..	..	Bread	31	..	..	..	..	..	..	..	..	..
9	..	Bread and Butter .....	..	..	..	..	..	..	..	..	..	..
42	..	Butter	44	..	..	..	..	..	..	..	..	..
5	..	Cakes, S eet	27	..	..	..	..	..	..	..	..	..
..	..	Camphor, Compound Tincture of..	9	..	..	..	..	..	..	..	..	..
..	..	Camphor, Spirit of.....	11	..	..	..	..	..	..	..	..	..
1	..	Cascara Extract	5	..	..	..	..	..	..	..	..	..
10	..	Cheese	23	..	..	..	..	..	..	..	..	..
..	..	Chillie Paste	2	2	..	2	..	..	..	..	..	..
..	..	Citric Acid	1	..	..	..	..	..	..	..	..	..
..	..	Cinnamon, Ground	7	..	..	..	..	..	..	..	..	..
..	..	Cocoa	24	..	..	..	..	..	..	..	..	..
23	..	Coffee	34	..	..	..	..	..	..	..	..	..
..	..	Cornflour	17	..	..	..	..	..	..	..	..	..
3	..	Cream	19	..	..	..	..	..	..	..	..	..
5	..	Cream, Tinned .....	..	..	..	..	..	..	..	..	..	..
..	..	Cream of Tartar	21	..	..	..	..	..	..	..	..	..
..	..	Custard Powder	25	..	..	..	..	..	..	..	..	..
2	..	Dripping	13	..	..	..	..	..	..	..	..	..
2	..	Distilled Water	5	..	..	..	..	..	..	..	..	..
..	..	Epsom Salts	18	..	..	..	..	..	..	..	..	..
8	..	Fish, Prepared	7	..	..	..	..	..	..	..	..	..
12	1	Fish, Tinned	3	..	..	..	..	..	..	..	..	..
4	..	Flour	29	2	..	2	..	..	..	..	..	..
..	..	Flour, Self-raising.....	28	..	..	..	..	..	..	..	..	..
..	..	Flowers of Sulphur	7	..	..	..	..	..	..	..	..	..
5	..	Fruit, Dried	56	..	..	..	..	..	..	..	..	..
5	..	Fruit, Tinned	13	..	..	..	..	..	..	..	..	..
1	..	Ginger, Ground	14	..	..	..	..	..	..	..	..	..
..	..	Glaubers Salts	16	..	..	..	..	..	..	..	..	..
..	..	Glycerine	18	..	..	..	..	..	..	..	..	..
..	..	Gregory Powder	5	..	..	..	..	..	..	..	..	..
5	..	Honey .....	..	..	..	..	..	..	..	..	..	..
1	..	Iodine, Tincture of	19	..	..	..	..	..	..	..	..	..
4	..	Jam	32	..	..	..	..	..	..	..	..	..
3	..	Jelly, Table .....	..	..	..	..	..	..	..	..	..	..
1	..	Lard	42	..	..	..	..	..	..	..	..	..
6	..	Lemon Cheese	2	..	..	..	..	..	..	..	..	..
..	..	Lentils.....	8	..	..	..	..	..	..	..	..	..
2	..	Lime Water	4	..	..	..	..	..	..	..	..	..
..	..	Liquorice, Compound Powder of...	9	..	..	..	..	..	..	..	..	..
..	..	Macaroni.....	8	..	..	..	..	..	..	..	..	..
3	..	Margarine	24	..	..	..	..	..	..	..	..	..
17	..	Meat, Prepared	31	..	..	..	..	..	..	..	..	..
2	..	Meat, Tinned.....	7	..	..	..	..	..	..	..	..	..
202	1	Carried forward	850	4	..	4	..	..	..	..	..	..

TABLE II.—*continued*

SHOWING THE PROCEEDINGS TAKEN UNDER THE PROVISIONS OF THE ADULTERATION OF FOOD AND DRUGS AND THE MARGARINE ACTS DURING THE YEAR 1935—*continued*

INFORMAL SAMPLES		ARTICLE	STATUTORY SAMPLES				PROSECUTIONS					
Number Obtained	Number Adulterated		Number Obtained	Number Adulterated	Referred to Town Clerk for legal proceedings	Number cautioned as the Adulteration was only slight	Number summoned before Magistrates	Number Fined	Number ordered to pay Costs only	Dismissed or Withdrawn	Amount of Fines Imposed	Amount of Costs ordered to be Paid
											£ s. d.	£ s. d.
202	1	Brought forward.....	850	4	..	4	..	..	..	..	..	..
8	..	Medicated Tablets and Lozenges ...	37	..	..	..	..	..	..	..	..	..
1	..	Mincemeat	4	..	..	..	..	..	..	..	..	..
1	..	Mustard	6	..	..	..	..	..	..	..	..	..
164	13	Milk	1237	62	8	54	8	6	2	..	29 0 0	5 18 0
13	..	Milk, Condensed .....	..	..	..	..	..	..	..	..	..	..
9	..	Milk, Dried	1	..	..	..	..	..	..	..	..	..
1	..	Milk, Skimmed	4	..	..	..	..	..	..	..	..	..
..	..	Milk of Sulphur	4	..	..	..	..	..	..	..	..	..
..	..	Oatmeal	28	..	..	..	..	..	..	..	..	..
3	..	Oil, Almond.....	8	..	..	..	..	..	..	..	..	..
..	..	„ Camphorated	17	..	..	..	..	..	..	..	..	..
..	..	„ Castor	11	..	..	..	..	..	..	..	..	..
..	..	„ Cod Liver	13	..	..	..	..	..	..	..	..	..
..	..	„ Olive	19	..	..	..	..	..	..	..	..	..
..	..	„ Paraffin.....	15	..	..	..	..	..	..	..	..	..
9	..	Ointment, Boric .....	..	..	..	..	..	..	..	..	..	..
..	..	„ Blue Uction	1	1	..	1	..	..	..	..	..	..
7	..	„ Sulphur	1	..	..	..	..	..	..	..	..	..
8	..	„ Zinc .....	..	..	..	..	..	..	..	..	..	..
..	..	Parrish's Chemical Food.....	2	..	..	..	..	..	..	..	..	..
..	..	Pepper	26	1	1	..	1	1	..	..	2 0 0	0 10 6
4	..	Pickles	7	..	..	..	..	..	..	..	..	..
..	..	Pill, Iron	6	..	..	..	..	..	..	..	..	..
2	..	Quinine, Ammoniated Tincture of..	8	..	..	..	..	..	..	..	..	..
..	..	Rice	38	..	..	..	..	..	..	..	..	..
..	..	Rice, Ground.....	17	..	..	..	..	..	..	..	..	..
3	..	Rhubarb, Compound Tincture of..	3	..	..	..	..	..	..	..	..	..
13	..	Sauces .....	..	..	..	..	..	..	..	..	..	..
3	1	Sausages	27	4	4	..	4	2	2	..	3 0 0	2 10 0
2	..	Seidlitz Powder.....	..	..	..	..	..	..	..	..	..	..
..	..	Suet	7	..	..	..	..	..	..	..	..	..
1	..	Sugar.....	38	..	..	..	..	..	..	..	..	..
..	..	Sweets	51	..	..	..	..	..	..	..	..	..
1	..	Sweet Spirit of Nitre .....	..	..	..	..	..	..	..	..	..	..
..	..	Tapioca	24	..	..	..	..	..	..	..	..	..
2	..	Tartaric Acid	7	..	..	..	..	..	..	..	..	..
..	..	Tea	41	..	..	..	..	..	..	..	..	..
7	..	Treacle and Golden Syrup	7	..	..	..	..	..	..	..	..	..
..	..	Tripe	6	1	..	1	..	..	..	..	..	..
5	..	Vegetables, Tinned	8	..	..	..	..	..	..	..	..	..
5	..	Vinegar	18	2	1	1	1	1	..	..	1 0 0	0 10 6
6	..	Beer.....	16	..	..	..	..	..	..	..	..	..
8	..	Cider .....	..	..	..	..	..	..	..	..	..	..
6	..	Cordials.....	6	..	..	..	..	..	..	..	..	..
22	3	Mineral and Aerated Waters	14	4	..	4	..	..	..	..	..	..
..	..	Spirits—	..	..	..	..	..	..	..	..	..	..
..	..	Brandy	29	..	..	..	..	..	..	..	..	..
..	..	Gin	28	..	..	..	..	..	..	..	..	..
..	..	Rum	36	1	1*	..	..	..	..	..	..	..
..	..	Whisky	49	1	1*	..	..	..	..	..	..	..
2	..	Wines	29	..	..	..	..	..	..	..	..	..
518	18	TOTALS	2804	81	16	65	14	10	4	..	35 0 0	9 9 0

* Proceedings not instituted owing to decease of defendant.

Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1927.

The provisions of these regulations have been enforced. All food samples governed by the regulations have been examined by the Public Analyst for the presence of preservatives, including :—

Samples of milk	1,401
Samples of other foodstuffs	530
Samples of foodstuffs specially submitted	317
Total	<u>2,248</u>

The number of offences continues to be very low. They are principally confined to technical omissions regarding the labelling and declaration of the preservative which in few cases exceeds the limit prescribed by the regulations.

A sample of milk obtained from a retailer was certified by the Public Analyst to contain 3 parts of formaldehyde per million parts of milk. A sample was procured without delay from the farmer supplier during course of delivery. Formaldehyde was found to be present in this sample to the extent of two parts in one million parts of milk. Prosecutions resulted in the farmer being fined £25 and costs, the retailer being mulcted in costs only.

PARTICULARS OF SAMPLES FOUND TO CONTRAVENE THE PUBLIC HEALTH
(PRESERVATIVES IN FOOD) REGULATIONS.

Article	Number of Sample	Result of Analysis	From whom sample Obtained	Result of Legal Proceedings		Remarks
				Fine	Costs	
				£ s. d.	£ s. d.	
Sausages	558 B	Contained 110 parts of sulphur dioxide per million parts	Retailer	—	0 18 6	Preservative not declared.
Do.	575 B	Contained 90 parts of sulphur dioxide per million parts	Wholesaler	2 0 0	0 10 6	Preservative not declared.
Do.	581	Contained 140 parts of sulphur dioxide per million parts	Retailer	—	0 10 6	Preservative not declared.
Do.	608	Contained 150 parts of sulphur dioxide per million parts	Wholesaler Manufacturer	1 0 0	0 10 6	Preservative not declared.
Liver Sausage ..	1598 B	Contained 40 parts of sulphur dioxide per million parts	Retailer	—	—	Informal sample.
Milk	731	Contained 3 parts of formaldehyde per million parts	Retailer	—	0 18 6	—
Do.	741	Contained 2 parts of formaldehyde per million parts	Farmer	25 0 0	1 11 6	—

Public Health (Condensed Milk) Regulations, 1923 and 1927.

Public Health (Dried Milk) Regulations, 1923 and 1927.

Thirteen samples of condensed milk and ten samples of dried milk were examined and found to comply with the regulations.

Artificial Cream Act, 1929.

Two premises have been registered and three discontinued during the year. Two premises are now on the register. Six visits have been made.

Registration of Wholesale Dealers in Margarine and Margarine Cheese.

Number on register, 31st December, 1934	120
Number registered during 1935	2
Number discontinued	5
Number on register, 31st December, 1935	117
Number of visits	120

There were no offences reported during the year.

In accordance with section 8 (2) Food and Drugs (Adulteration) Act, 1928, notification of changes in registration were sent to the Ministry of Agriculture and Fisheries.

FOOD PREPARING PREMISES REGISTERED UNDER THE MANCHESTER
CORPORATION (GENERAL POWERS) ACT, 1930.

The number of premises on the register at the end of the year was 486, at which the following foods are prepared:—

Sausages	at 243 premises
Potted meat and brawn	175 „
Roast and boiled ham	133 „
Pressed, pickled, cooked, etc., beef and tongue ..	81 „
Roast pork	33 „
Bacon	8 „
Fish paste	17 „
Boiled crabs and lobsters	13 „
Pickled fish	3 „
Pickled onions	1 „

883 inspections were made during the year, and the premises with few exceptions were found to be satisfactory.

On nine occasions the inspectors cautioned the proprietors regarding dirty conditions which were found to be remedied on subsequent visits.

Certificates of registration were transferred at 16 premises due to changes of occupiers. Fourteen premises were removed from the register owing to discontinuance.

Ten new applications for registration were made. After inspection with regard to structural fitness, equipment, and cleanliness reports were submitted to the Public Health Committee. In six cases the premises were reported to be satisfactory and certificates were granted. In the other four cases the conditions were unsatisfactory. One was subsequently brought up to an adequate standard of fitness and registered. The three remaining cases stand adjourned,

DETAILS OF APPLICATIONS RECEIVED.

Nature of Business	Applications for registration	Reported satisfactory and certificates granted	Registered after necessary requirements fulfilled	Registration refused	Stand adjudged	Withdrawn
Sausages	3	2	1	—	—	—
Potted Meat	2	1	—	—	1	—
Potted meat, boiled and roast ham and pork	1	—	—	—	1	—
Sausages, brawn, etc.	2	2	—	—	—	—
Boiled Ham	1	1	—	—	—	—
Sausages, Pressed and Pickled Beef	1	—	—	—	1	—
Totals	10	6	1	—	3	—

APPLICATIONS OUTSTANDING AT THE END OF 1934.

There was one application outstanding which has since been withdrawn.

BAKEHOUSES.

There are 649 bakehouses in the City, of which 619 are above ground and 30 underground. Of the underground bakehouses only 11 are now being used. In 1901 there were in use 160 underground bakehouses and 389 above ground bakehouses.

Strict supervision continues to be maintained over all bakehouses to ensure that the food produced therein is manufactured under cleanly and hygienic conditions. In one instance it was necessary to institute legal proceedings against the occupier of a dirty bakehouse. The defendant was fined £2.

Number of inspections during 1935	4,418
Number on register at end of 1934	649
Number registered during the year	8
Number removed from the register during the year	8
Number on register at the end of 1935	649
Sanitary defects remedied after cautions	53
Notices served for sanitary defects	2
Notices complied with (sanitary defects)	2
Dirty conditions remedied after caution (includes one from 1934) ..	32
Prosecution for dirty bakehouse	1
Amount of fine	£2
Cautions to cleanse given and work outstanding at the end of the year	3
Applications for registration of new bakehouses	24
Applications approved subject to fulfilment of the requirements of the Medical Officer of Health	15
Applications refused on ground of unfitness	3
Applications withdrawn	6
Changes of occupiers recorded	43

In addition to the foregoing applications, plans of 17 bakehouses submitted to the Town Planning and Buildings Committee and referred to the Medical Officer of Health were recommended for approval subject to fulfilment of the requirements of the Medical Officer of Health.

Restaurant and Cafe Kitchens.

There are 265 such premises recorded in the department. 467 inspections were made during the year by the male and female inspectors. The premises were found to be clean and satisfactory with the following exceptions :—

Unsatisfactory Conditions Reported	Premises	Result of Action Taken
Dirty	19	All cleansed.
Inadequate ventilation	2	Remedied in one case. Outstanding in one case.
Insufficient water-closet accommodation	3	All remedied.
Defective walls and floors	2	All repaired.
Choked sink waste-pipe	1	Remedied.
Broken windows	3	All renewed.

Existing legislation does not appear to be adequate to attain and maintain the necessary standard of structural efficiency and cleanliness required for premises of this character.

It is desirable that legal powers be acquired to enable the enforcement of the following requirements :—

- (a) Registration of all restaurant and cafe kitchens.
- (b) Power to refuse registration of unsuitable premises.
- (c) Walls and floors to have smooth impervious surfaces, ceilings to be smooth and easily cleansed, angles to be coved, shelves to be spaced from walls.
- (d) Furniture to be suitable and sufficient and fitted with castors.
- (e) Structure and furniture to be maintained in good condition.
- (f) Adequate light and ventilation.
- (g) Adequate supply of hot and cold water.
- (h) Kitchen not be to used for domestic purposes or for any other purpose likely to involve contamination of food.
- (i) Food to be stored under suitable conditions.
- (j) Animals to be excluded from kitchens and food stores.
- (k) Suitable and sufficient accommodation for refuse.
- (l) Frequent removal of refuse and cleansing of receptacles.
- (m) Facilities for personal ablution of persons employed.
- (n) adequate cloak-room accommodation.
- (o) Scrupulous cleanliness to be maintained.
- (p) Penalties for offences.

Butchers' Shops and Bacon Stores.

654 inspections of these premises were made during the year to ascertain contraventions of the Public Health (Meat) Regulations, 1924, which require meat to be protected from contamination by dirt, flies, etc.

Whilst the premises were generally found to be satisfactory, in 15 instances it was necessary for the inspectors to issue cautions with respect to dirty conditions. These were all complied with and on no occasion was it necessary to institute legal proceedings.

SALE OF FOODSTUFFS AT OPEN MARKETS.

During the year 48 visits have been paid to open-air markets where foodstuffs are sold, with a view to the conditions being maintained as clean and satisfactory as possible having regard to the limited powers of control at present.

Draft byelaws made under the Manchester Corporation (General Powers) Act, 1934, have been prepared and submitted to the Ministry of Health for provisional approval. These byelaws include clauses for the following:—

- (1) Provision and maintenance of adequate drainage and paving.
- (2) Provision and maintenance of suitable and sufficient water-closet and urinal accommodation for the use of persons employed in and for the public frequenting the market.
- (3) Provision and maintenance of adequate hot and cold water supply for:—
 - (a) Personal cleansing of persons employed.
 - (b) Adequate cleansing of stalls and equipment.
 - (c) Adequate flushing and cleansing of surface.
- (4) Provision and maintenance of adequate cloak-room accommodation for persons employed.

HOUSING ACTIVITIES.

The number of new houses completed in the City during 1935 was 3,200. Of these, 1,379 have been erected by the local authority and 1,821 by other bodies or persons.

Occupied houses, excluding tenement dwellings, on the Corporation estates at the close of the year numbered 23,790. This figure includes 150 cottages built pre-war at Blackley.

The number of tenement dwellings owned by the Corporation is 957.

HOUSE INSPECTION.

Housing Act, 1925, and Housing Consolidated Regulations, 1925 to 1932.

Systematic inspection of dwelling-houses under the above Acts and Regulations has been carried out.

Primary house-to-house inspections numbered 7,247, and these have been classified as follows:—

Unfit for habitation	6,831
Minor defects	191
No defects recorded	225

Details of these inspections are given in Tables A, B, and C (see pages 372 to 374).

Under Public Health Acts and Local Acts.

Primary inspections have been made at 16,763 houses, principally as a result of complaints or the occurrence of cases of infectious disease. Defects found have been dealt with as follows :—

- (a) At 6,276 houses defects have been remedied on the issue of letters or informal notices.
- (b) At 3,698 houses the defects have been dealt with by statutory notices under the Public Health Acts or Local Acts, and remedy effected by the owners in 3,558 cases and by the local authority in default in 189 cases.

Total Number of House Inspections.

The total number of inspections (including revisits) of houses during the year for all purposes was 98,925. A summarised analysis of these figures is to be found in Table D, page 375, and Table 4, page 403.

Defective Houses on List for consideration of Committee.

There are many thousands of houses in the City which are in such a condition as to render reconditioning impracticable. In due course these will be dealt with under the Housing Acts, 1930 and 1935. Meanwhile, defects of an urgent character such as choked drains, leaky roofs, broken floors, and defective surfaces of yards and passages require immediate attention. Letters were sent to the owners regarding urgent defects at 3,896 such houses and the work was carried out at 3,068. Statutory notices were necessary with respect to urgent defects at 518 houses.

OVERCROWDING.

During the year 437 cases of overcrowding have been abated by the removal of families from clearance areas.

At houses-let-in-lodgings overcrowding has been abated in 14 instances as the result of cautionary letters or personal cautions by the inspectors.

Representations were made to the Housing Director in 149 cases with a view to Corporation houses or flats being allocated. Such accommodation has been provided for 39 overcrowded families, including two cases reported during 1934.

Overcrowding has been abated at three houses as the result of cautionary letters from the department.

CLEANSING OF HOUSES AND APPURTENANCES.

The department continues to exercise its powers to improve the standard of cleanliness in dwelling-houses by issuing cautions or by serving statutory notices on the tenants regarding dirty or verminous conditions found at their homes.

114 such houses were cleansed as a result of verbal cautions by the sanitary inspectors, 26 cautionary letters were complied with, and 31 statutory notices were served, 28 of these being complied with.

In two instances it was necessary to institute legal proceedings. Magistrates' orders were granted in both cases, the defendants being ordered to pay costs amounting to 16/-.

The Public Health Committee has made arrangements whereby on the certificate of the district sanitary inspector poor people can obtain lime for limewashing gratis and may borrow brushes for the purpose without charge.

During the year 2,255 brushes were loaned and 26,782 lbs. of lime distributed.

Special investigations in connection with the eradication of cockroaches and other insect pests are still being carried out by the special inspectors.

HOUSES LET-IN-LODGINGS.

This type of dwelling, which includes "farmed out" houses, has continued to receive close attention to ensure that the living conditions are maintained as satisfactorily as possible under the circumstances, and that the byelaws which control them are being observed.

Reference was made in my annual report for 1934 to the need for new byelaws, and the general principles which should form the basis of those byelaws were outlined. Draft byelaws have been prepared and have been submitted to the Ministry of Health for approval.

The number of houses on the register as houses-let-in-lodgings is 1,274, including 465 which are "farmed-out" houses. The total number of rooms is 9,186, and accommodation is provided for 25,229 persons in these houses.

During the year 8,061 day inspections and 292 night inspections were made.

In 134 instances infringements of the byelaws have been remedied as the result of verbal cautions by the inspectors.

It has been necessary to serve statutory notices in the following cases :—

Requirements	Notices served	*Notices complied with
	Houses	Houses
To furnish particulars	219	214
To provide additional watercloset accommodation	—	1
To provide water supply and sinks	22	23
To provide ventilation to rooms, staircases, and passages	19	18
To provide ventilation to food cupboards	1	—
To cleanse ceilings and walls (farmed houses) ..	163	153
Totals	424	409

* Some of these notices were outstanding at the end of 1934.

90 offences against the byelaws were reported to the Committee. Details of these offences and subsequent proceedings are given in the following table :—

HOUSES LET-IN-LODGINGS—OFFENCES REPORTED TO COMMITTEE.

OFFENCE	COMMITTEE PROCEEDINGS					MAGISTERIAL PROCEEDINGS					
	Number Reported	Ordered to be Summoned	Work done before issue of Summons	Cautioned or Excused	Number Summoned	Fined	Ordered to pay Costs only	Withdrawn	Dismissed	Amount of	
										Fines	Costs
Failing to furnish particulars	41	41	41	—	—	—	—	—	—	£ s. d.	£ s. d.
Dirty walls, floors, or bedding	8	8	2	1	5	4	—	1	—	2 10 0	—
Overcrowding or mixing of sexes.. .. .	8	8	3	2	3	1	1	—	1	0 5 0	0 12 0
Using unregistered rooms for sleeping.. .. .	2	2	2	—	—	—	—	—	—	—	—
Non-compliance with notices to cleanse, etc. ..	6	6	3	—	3	3	—	—	—	3 0 0	—
Non-compliance with notices to provide adequate means of ventilation	4	4	4	—	—	—	—	—	—	—	—
Non-compliance with notices to provide additional water-closet accommodation	1	1	1	—	—	—	—	—	—	—	—
Non-compliance with notices to provide water supply and sinks	18	18	18	—	—	—	—	—	—	—	—
Refusing to allow inspection	2	*1	—	1	—	—	—	—	—	—	—
Totals	90	89	74	4	11	8	1	1	1	5 15 0	0 12 0

* No proceedings taken, as offender had removed before summons was issued.

Municipal Hostels.

“Walton House,” the municipal hostel for men, situated in Harrison Street, Ancoats, has accommodation for 465 men in separate cubicles. The charge is 1/- per night or 6/6 per week.

The hostel has been well patronised during the year ended 31st March, 1936, the average number of beds occupied each night being 460.

The majority of the men are permanent residents and every effort is made to make the hostel a comfortable home.

“Ashton House” is a similar establishment for women and is situated in close proximity to the City in Corporation Street.

The hostel is well appointed and contains 210 separate cubicles which are let at 10d. and 1/- per night with a reduction for weekly bookings.

Patronage has continued to decline, the average number of beds occupied per night during the year ended 31st March, 1936, having fallen to 97 as compared with 114 for the previous year.

A special sub-committee has considered the advisability of closing this hostel for women and has decided not to take this action for the present in anticipation of an improvement as a result of slum clearance, which will cause the demolition of several common lodging-houses for women in the vicinity.

In both hostels, in addition to the living and sleeping accommodation, facilities are provided for the lodgers to purchase and cook their own food or for the purchase of cooked meals and also laundry accommodation for the washing of personal clothing.

CARAVAN DWELLINGS.

This phase of the housing problem continues to receive attention. Caravans or movable dwellings are divisible into two groups, *i.e.*—

- (a) Structures occupied by travelling showmen or gypsies and remaining on sites for short periods.
- (b) Structures used as permanent dwellings and which are in position for relatively long periods.

Byelaws made under Section 9 of the Housing of the Working Classes Act, 1885, are administered by this department. These byelaws require the provision of water supply and closet accommodation on the land where the vans are situate and enable steps to be taken to prevent nuisances and the spread of infectious disease.

Section 18 of the Manchester Corporation Act, 1891, which is administered by the Town Planning and Buildings Committee enables the Corporation to proceed against any person who sets up or erects any structure or erection of a temporary or movable character *without first having obtained a licence from the Corporation*. Any tent remaining for less than seven days is exempted.

Thirteen reports involving 120 caravans were referred to the City Architect during the year.

645 inspections were made and 56 copies of the byelaws served.

Reports were submitted to the Committee concerning seven caravans where the byelaws were not complied with. The vans were removed before the institution of legal proceedings could be effected.

Forty-one caravans were reported to have been removed during 1935.

A complete survey embracing all the caravans and similar structures in the City has been made during the year and has revealed the following conditions :—

Number of sites	34
Number of occupied caravans	132
Number of unoccupied caravans	14
Number of male van dwellers	133
Number of female van dwellers	152
Number of children under 10 years.. .. .	60
—	
Total number of van dwellers	345
Number of sites where water supply and water-closet accommodation is provided on the land	11
Number of caravans on such sites	80

It was ascertained during the survey that the rents charged vary from 2/- to 8/- weekly for the use of site where the structure belongs to the van dweller and from 5/- to 10/- weekly where the van is rented.

The conditions under which this type of habitation exists in the City have been under review jointly by representatives of the Legal Department, Town Planning and Building Department, and this department, both with regard to licensing and to other action open to the Corporation.

The following issues present themselves as the result of experience of this department in dealing with such dwellings :—

- (1) There are certain sites now used for caravan dwellings which are unsuitable for such purpose and for the accommodation of which no licences should be issued. These sites are primarily, if not exclusively, situated in areas so fully occupied by housing that the vans themselves inevitably give rise to nuisance or disturbance of the normal amenities of life in the neighbouring housing property. This refusal to license also applies in general to such sites as the yards of business premises, stable yards, etc., which are clearly unsuitable for any kind of dwelling.
- (2) It is undesirable that licences should be granted for the establishment of caravan dwellings on any site which is not properly surfaced and drained and provided with water supply and sanitary conveniences adequate for the use of the caravan dwellers.
- (3) No licences should be granted for a period of more than six months. This condition would eliminate the permanent caravan dwelling and would provide a sufficient period of fixed dwelling during the winter months for the genuine showman or nomadic caravan dweller.
- (4) In a considerable number of instances the caravans are placed on the ground in close proximity to each other. It is desirable that some condition should be attached to the granting of licences which will ensure that a reasonable spacing of the vans, either from other vans or from temporary structures such as show tents, etc., shall permit of adequate ventilation and air space around the vans as dwelling places.
- (5) Under Section 80 of the Housing Act, 1935, it is clear that vans are dwellings for the purposes of part 1 and part 2. It is, however, difficult to know to what extent the powers of this Act can be applied to these dwellings as individual structures.

It does not seem practicable to apply the ordinary standards of accommodation of housing, such as floor-space, number of persons per house, etc., to van dwellings.

No standard appears to have been laid down for caravan dwellings other than the Model Byelaws, and these do not refer in any way to floor space or provision for food accommodation or any such ordinary domestic arrangement.

The only comparable feature is to be found in the specification of accommodation in canal boats, which are similarly movable dwellings, though it is doubtful if we could recognise such a standard as being satisfactory.

In any event there is a further difficulty under the Housing Act of proving that any caravan has been on its site for the required period of two years, and there is the added difficulty that many of the caravans have not in fact been two years on their site and could not be dealt with at all under this Act.

- (6) The most practicable method of dealing with these structures would appear to be through the powers contained in the Manchester Corporation Act, 1891, section 18, whereby conditions attached to licensing would ensure in the manner above indicated the abolition of caravan dwellings as permanent structures in the City, and only permit the provision of such housing for a limited period in each year for the genuine nomads, and that on sites properly prepared for the purpose.

It has been arranged that the Town Clerk should prepare a report on the matter to be submitted to the Town Planning and Buildings Committee and to the Public Health Committee with a view to a definite course of action being decided upon.

RENT RESTRICTION ACTS.

The tenants of eleven dwelling-houses made application for certificates that the houses in their occupation were not in a reasonable state of repair. Inspections were made and reports submitted to the Public Health Committee. Certificates were granted in eight cases. In the remaining three cases the necessary repairs have been effected prior to the reports being submitted to the Committee.

WORK DONE BY DISTRICT SANITARY INSPECTORS IN CONNECTION WITH INFECTIOUS DISEASES.

Infectious cases investigated	4,620
Primary visits to infected houses	4,556
Subsequent visits to infected houses	1,974
Inspections <i>re</i> tuberculosis	13,536
Other visits <i>re</i> tuberculosis	3,849
Visits to contacts :—	
Smallpox	31
Scarlet fever	252
Diphtheria	64
Other contacts	50
	— 397
Rooms fumigated by Inspectors	3,618
Hospitals wards fumigated by Inspectors	4
Rooms disinfected by Corporation workmen	1,562
Rooms disinfected by tenants	3,959

TABLE A.
TABLES SHOWING RESULTS OF HOUSE-TO-HOUSE INSPECTIONS.

Ward	Number of Houses Inspected	Number of Rooms per House							Business Premises		Overcrowding			
		1	2	3	4	5	6	7	Over 7	Part	Total	Registrar General's Standard	Manchester Standard	Social Standard
All Saints ..	113	—	9	24	32	35	6	7	—	11	12	1	13	11
Ardwick ..	231	—	11	72	56	70	10	6	6	46	17	—	18	15
Beswick ..	261	—	3	124	79	52	2	1	—	31	15	—	53	43
Blackley ..	175	—	1	24	51	94	4	—	1	10	—	—	22	19
Bradford ..	376	—	1	123	131	96	19	6	—	21	4	7	76	53
Cheetham ..	133	—	—	12	86	27	8	—	—	11	1	—	19	18
Chorlton-cum-Hardy ..	534	—	3	5	300	122	81	21	2	29	3	—	18	16
Collegiate ..	224	—	—	8	194	1	—	7	14	10	1	—	17	14
Collyhurst ..	142	—	6	38	49	48	—	—	1	6	5	—	32	24
Crumpsall ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Didsbury ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exchange ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gorton North ..	264	—	—	3	190	68	3	—	—	9	1	—	19	14
Gorton South ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Harpurhey ..	211	—	—	1	122	68	20	—	—	25	2	—	15	14
Levenshulme ..	223	—	2	3	105	95	18	—	—	14	1	—	7	6
Longsight ..	574	—	3	7	82	64	320	73	25	32	26	—	28	27
Medlock Street ..	214	—	3	11	115	82	2	1	—	22	7	—	17	14
Miles Platting ..	201	—	13	31	94	62	1	—	—	21	9	—	24	20
Moston ..	126	—	1	20	80	24	—	1	—	23	7	2	10	10
Moss Side East ..	416	—	4	24	210	136	30	3	9	56	7	—	29	26
Moss Side West ..	379	—	—	1	100	143	63	70	2	46	23	—	9	8
New Cross ..	365	—	28	49	229	39	12	5	3	72	47	2	74	58
Newton Heath ..	88	—	1	14	59	10	3	1	—	16	4	1	12	10
Openshaw ..	182	—	—	6	125	51	—	—	—	7	—	—	21	14
Oxford ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rusholme ..	446	—	—	3	151	28	236	9	19	3	—	—	14	12
St. Ann's ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
St. Clement's ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
St. George's ..	464	—	9	93	119	196	36	5	6	84	—	—	36	20
St. John's ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
St. Luke's ..	265	—	1	33	70	95	22	28	16	31	6	—	25	24
St. Mark's ..	358	—	—	114	131	66	16	20	11	68	15	1	50	44
St. Michael's ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Withington..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Wythenshawe ..	282	—	—	38	65	143	22	12	2	22	11	2	19	19
Totals	7,247	—	99	881	3025	1915	934	276	117	726	219	16	677	553

TABLE B.

WARDS	Number of Houses Inspected	Want of Cleanliness	In-adequate Light	In-adequate Ventilation	Dampness	Without proper accommodation for		Disrepair	Bad Arrangement	CLASSIFICATION			
						Food Store	Domestic Washing			No Defects Recorded	Minor Defects	Remediable without reconstruction	Irremediable without reconstruction
All Saints	113	1	111	111	5	109	14	109	113	2	—	—	111
Ardwick	231	6	184	184	117	231	29	174	229	—	27	—	202
Beswick	261	—	144	155	60	260	25	213	172	—	65	—	172
Blackley	175	—	21	22	98	175	9	75	96	30	5	95	45
Bradford	376	24	121	155	131	375	52	365	93	—	16	279	81
Cheetham	133	—	19	41	14	133	22	76	37	—	—	127	6
Chorlton-cum-Hardy	534	1	13	6	11	526	26	212	40	6	—	512	16
Collegiate Church	224	—	4	4	102	224	81	193	13	—	5	215	4
Collyhurst	142	3	60	56	39	142	13	94	64	—	38	41	63
Crumpsall	—	—	—	—	—	—	—	—	—	—	—	—	—
Didsbury	—	—	—	—	—	—	—	—	—	—	—	—	—
Exchange	—	—	—	—	—	258	—	—	—	—	—	—	—
Gorton North	264	—	—	27	127	—	19	231	—	—	—	264	—
Gorton South	—	—	—	—	—	—	—	—	—	—	—	—	—
Harpurhey	211	—	—	—	15	211	4	113	35	43	36	97	35
Levenshulme	223	—	3	50	33	222	34	112	—	—	—	223	—
Longsight	574	9	47	23	191	551	34	324	118	30	29	483	32
Medlock Street	214	8	194	206	155	214	8	205	214	—	—	—	214
Miles Platting	201	5	136	148	104	200	37	177	188	2	2	12	185
Moston	126	2	2	2	44	126	6	58	2	61	1	60	4
Moss Side East	416	—	211	215	261	371	37	349	226	12	3	186	215
Moss Side West	379	2	102	269	191	354	6	322	284	—	—	298	81
New Cross	365	2	306	311	262	363	81	296	311	—	—	54	311
Newton Heath	88	—	5	21	17	88	—	58	30	13	17	28	30
Openshaw	182	—	124	126	113	117	5	138	—	—	6	176	—
Oxford	—	—	—	—	—	—	—	—	—	—	—	—	—
Rusholme	446	—	19	—	38	360	61	106	49	22	3	406	15
St. Ann's	—	—	—	—	—	—	—	—	—	—	—	—	—
St. Clement's	—	—	—	—	—	—	—	—	—	—	—	—	—
St. George's	464	5	401	417	339	464	68	449	442	—	2	23	439
St. John's	—	—	—	—	—	—	—	—	—	—	—	—	—
St. Luke's	265	1	129	167	108	244	18	175	259	2	—	98	165
St. Mark's	358	3	79	258	241	356	20	289	322	—	—	69	289
St. Michael's	—	—	—	—	—	—	—	—	—	—	—	—	—
Withington	—	—	—	—	—	—	—	—	—	—	—	—	—
Wythenshawe	282	—	56	76	167	240	29	222	56	2	2	222	56
TOTALS	7,247	72	2,491	3,050	2,983	6,934	738	5,135	3,393	225	191	4,060	2,771

TABLE C.
DETAILS OF HOUSE TO HOUSE INSPECTIONS MADE DURING 1935, UNDER SECTION 8, HOUSING ACT, 1925.

No. of Rooms per Tenement	No. of Individuals in Private Families or Tenements			No. of Individuals per Room			No. of Children under 10 years per Family or Tenement			Overcrowding		
	Families or Tenements	Population	Individuals per Family or Tenement	Rooms	Population	Individuals per Room	Families or Tenements	Children under 10	Children per Family or Tenement	Registrar- General's Standard	Man- chester Standard	Social Standard
One . . .	—	—	—	—	—	—	—	—	—	—	—	—
Two . . .	99	227	2·29	198	227	1·14	99	38	0·38	1	15	10
Three . . .	881	3,036	3·44	2,643	3,036	1·15	881	563	0·63	10	160	127
Four . . .	3,025	9,876	3·26	12,100	9,876	0·81	3,025	1,593	0·52	4	385	326
Five . . .	1,915	6,826	3·55	9,575	6,826	0·71	1,915	902	0·47	1	81	57
Six . . .	934	3,572	3·82	5,604	3,572	0·63	934	454	0·48	—	29	26
Seven . . .	276	1,403	5·08	1,932	1,403	0·72	276	184	0·65	—	7	7
Over Seven	117	625	5·34	—	—	—	117	62	0·53	—	—	—
Totals . .	7,247	25,565	3·52	32,052	24,940	0·77	7,247	3,796	0·52	16	677	553

TABLE D.

HOUSING CONDITIONS—YEAR ENDED 31ST DECEMBER, 1935, IN THE
FORM REQUIRED BY THE MINISTER OF HEALTH.

*General Statistics.*1. *Inspection of Dwelling-houses during the Year.*

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ..	23,010
(b) Number of inspections made for the purpose	73,128
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	7,247
(b) Number of inspections made for the purpose	15,310
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	6,831
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	191

2. *Remedy of Defects during the Year without Service of Formal Notices.*

Number of defective dwelling-houses repaired in consequence of informal action by the local authority or their officers	6,276
---	-------

3. *Action under Statutory Powers during the Year.*(A) *Proceedings under sections 17, 18, and 23 of the Housing Act, 1930.*

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	—
(2) Number of dwelling-houses in which defects were remedied after service of formal notices—	
(a) By owners	—
(b) By local authority in default of owners ..	—

(B) *Proceedings under Public Health Acts.*

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	3,698
(2) Number of dwelling-houses in which defects were remedied after service of formal notices—	
(a) By owners	3,558
(b) By local authority in default of owners ..	189

(c) *Proceedings under sections 19 and 21 of the Housing Act, 1930.*

(1) Number of dwelling-houses in respect of which demolition orders were made	11
---	----

(2) Number of dwelling-houses demolished in pursuance of demolition orders	5
--	---

(d) *Proceedings under section 20 of the Housing Act, 1930.*

(1) Number of separate tenements or underground rooms in respect of which closing orders were made ..	—
---	---

(2) Number of separate tenements or underground rooms in respect of which closing orders were determined, the tenement or room having been rendered fit ..	—
--	---

Water Supplies.

With few exceptions, the dwelling-houses in the City are supplied with town's water.

These exceptions comprise two cottages in Crumpsall where the supplies are drawn from a spring ; a cottage in Didsbury which obtains its water from a well ; and a number of houses in the outlying portions of Wythenshawe, where wells provide the supply.

Samples of water from Corporation mains are obtained and submitted for bacteriological and chemical examination, not only on receipt of complaints, but as a routine practice. The following samples of town's water were taken during 1935 :—

* For bacteriological examination	56
* For chemical examination	56
For macroscopical examination	17

* The analytical results of these samples were communicated to the Waterworks Department.

Samples of water from the various storage reservoirs are submitted by the Waterworks Department for analysis and the results communicated to the Medical Officer of Health.

Reports were submitted to the Waterworks Department regarding 112 houses where the pressure of water was inadequate.

Samples of water from five wells in Wythenshawe supplying nine houses have been analysed. The water from two wells supplying two houses was reported to be satisfactory. Samples from the remaining three wells supplying seven houses revealed evidence of contamination.

During the year 26 wells in Wythenshawe supplying 36 houses have been closed and town's water laid on.

Since the inclusion of Wythenshawe within the City in April, 1931, samples of water have been obtained from all the known wells in the district and submitted for analysis.

These wells numbered 91, and supplied 145 houses. Nine wells supplying 10 houses were reported to be satisfactory. Eighty-two wells supplying 135 houses were contaminated.

Forty-three wells supplying 70 houses have since been closed and town's water laid on to the houses, in addition to one house which was without a supply.

Thirty-nine wells supplying 65 houses are still considered to be unsatisfactory. In all these cases reports have been submitted to the City Surveyor with a view, if possible, to action under section 62 of the Public Health Act, 1875; but in many cases the cost of installing town's water would be considerable, owing to the distance from the nearest water main. As a precautionary measure, pending the provision of a pure supply, the users of water from contaminated wells have been advised to boil all water for domestic use.

Nine houses in Wythenshawe whose water supply is from contaminated wells have been reported for demolition action under section 19 of the Housing Act, 1930.

The Corporation Waterworks Department have supplied the following particulars regarding the length of water mains laid in Wythenshawe since incorporation :—

	Baguley	Northenden	Northern Etchells	Total
	Yards	Yards	Yards	Yards
Prior to 31st March, 1935 ..	11,236	14,532	33,379	59,147
Year ending 31st March, 1936	899	2,097	9,835	12,831
Totals	12,135	16,629	43,214	71,978

The water from the spring supplying the two houses in Crumpsall, and from the well supplying the cottage in Didsbury has been submitted for analysis and reported to be satisfactory.

Drainage Defects and Repairs to Surfaces of Yards and Passages.

These are dealt with either by informal notices, or by statutory notices under the Public Health Acts or local Acts.

The reconstruction, repair, or provision of drains at 23 premises, and repairs to surfaces of yards and passages at 69 premises, have been effected as the result of informal action (see Table 5, page 404).

As the result of statutory notices, drainage work has been carried out at 499 premises, and the surfaces of yards or passages repaired or relaid at 1,675 premises (see Table 6, page 405).

If the work is carried out by the owner's contractor, supervision is exercised by the district sanitary inspector.

In cases of default, or at the owner's request, the drainage branch of the department executes the work, the recoverable costs being charged to the owner.

During the year the drainage branch carried out such work at 1,312 premises at a cost of £4,856 17s. 4d.

All drains reconstructed, repaired, or provided, and the drains of all new buildings (other than those on the Corporation housing estates) are subjected to the water test by officials of this department. The number tested during the year was 4,212, in addition to those tested by the drainage branch of the department.

It is an offence under the Manchester Corporation (General Powers) Act, 1930, to repair and cover drains without first giving notice to the Corporation to enable such drains to be inspected and tested.

Four offenders were reported during the year, but it was not necessary to institute legal proceedings, as the drains were subsequently exposed for inspection and testing.

As the result of the conference between representatives of the Highways Committee and Public Health Committee in 1934 (see Annual Report 1934, folio 331) regarding the necessity for the provision of sewers in Wythenshawe to enable cesspools to be abolished, the special arrangements then entered into between the two Committees have during 1935 resulted in 18 cesspools serving 24 houses being removed, and the drains connected to the extended sewers.

Closet Accommodation.

During the year 19 slop water-closets, 48 pail-closets, and 4 privies were demolished or converted to water-closets.

The present closet accommodation in the City is as follows :—

Water-closets	.. ..	278,162
Slop water-closets	.. ..	33 (including 4 in Wythenshawe).
Pail-closets	.. ..	877 (including 296 in Wythenshawe and 63 in Clearance Areas).
Privies	.. ..	244 (including 206 in Wythenshawe).

Sanitary Conveniences at Parks, Cemeteries, and Open Spaces.

These have been regularly inspected with a view to the maintenance of cleanliness and freedom from nuisance, involving 1,365 inspections.

In 31 instances, defects were reported such as choked drains, broken closet seats, defective flushing arrangements, dirty conditions, etc., and which were subsequently remedied as a result of representations to the Parks Department.

In addition, some of the conveniences were found to be structurally unfit to such an extent as to render maintenance in a sanitary condition impossible. This is particularly applicable to the provision made at Willert Street Recreation Ground (which has been the subject of comment in previous annual reports), and at St. John's Recreation Ground.

Detailed reports and photographs of these conveniences were submitted to the Public Health Committee, who resolved that the Parks and Cemeteries Committee be requested to provide proper sanitary conveniences for males and females at both the recreation grounds referred to, and to give instructions for all plans of sanitary conveniences to be submitted for the approval of the Medical Officer of Health.

This resolution was ratified by the City Council, 5th June, 1935, and at a subsequent meeting of the City Council estimates were approved for erection of sanitary accommodation at both these places during the financial year 1936-1937.

The attention of the Public Health Committee has also been drawn to the unsatisfactory condition of some of the conveniences in Wythenshawe Park in a report by the Medical Officer of Health.

These conveniences consist of wooden structures containing pail-closets and wooden trough urinals.

Proposals were submitted for the erection of a dual entrance convenience situate at the corner of Princess Parkway and Wythenshawe Road, which could be arranged to serve the general public and visitors to the Park. It was decided to defer consideration of this scheme pending the submission of a report by the Town Clerk regarding co-ordination between the Parks, etc., Committee and the Public Health Committee in relation to public conveniences in parks, etc.

The report has been duly submitted. Joint action between the two Committees is being arranged for the future wherever such functions of the Committees coincide. An initial survey of the conveniences in the parks was advised as a basis of action.

A complete survey has therefore been made by this department of all the conveniences at the various parks, cemeteries, and open spaces, with special reference to—

- (a) Structural conditions.
- (b) Proximity to public street.
- (c) Accessibility to public when park is closed.
- (d) Need for additional provision.

Detailed reports have been prepared which indicate that in connection with the 63 parks, etc., visited, the conveniences can be considered satisfactory, and ample in 22 cases. In the remaining 41 parks, etc., either the structural conditions are unsatisfactory or the accommodation is inadequate.

The principal features demanding attention, in addition to the requirements at Willert Street and St. John's Recreation Grounds previously referred to are :—

- (a) Conversion of pail-closets to water-closets at—
Wythenshawe Park.
Boggart Hole Clough.
Philips Park.
- (b) Replacement of trough closets by pedestal wash-down water-closets at some of the parks.
- (c) Provision of separate flushing arrangements to many of the water-closets in lieu of the existing automatic flush cisterns.
- (d) Substitution of glazed stoneware cradleback urinals, with proper flushing arrangements, for existing slate slab urinals at many of the parks.
- (e) Provision of additional accommodation at some of the parks.

Conferences have taken place between representatives of the two departments with a view to a programme of work being drawn up by the Parks Committee, to be related over a period of years to the programme of the Public Health Committee.

Public Conveniences.

A change in the administration of this service was made in October, 1935, on the retirement of foreman of public conveniences.

Hitherto the foreman had been responsible for the supervision and cleanliness of the conveniences, whilst administrative details had been dealt with by the internal staff.

It was realised that unification of the work would tend to greater efficiency and economy. A supervisor of public conveniences has been appointed who is responsible to the Chief Sanitary Inspector for the cleanliness, staff, stocks, notification of repairs necessary, and the general supervision of all matters connected with the public conveniences.

The males convenience in Albert Square, which was originally built in 1891, has been entirely reconstructed. The accommodation provided consists of six water-closets, twelve urinal stalls, four lavatory bowls, and parcels accommodation.

Work has been commenced on the construction of new conveniences at All Saints for males and females.

A dilapidated iron urinal situate in Ashley Street, Rochdale Road, has been demolished, and a substantial brick-built urinal with glazed stoneware stalls substituted. The urinal at the corner of Rochdale Road and Reather Street has been reconstructed.

Two urinals in the centre of the City, both of which were insanitary and lacking in privacy, have been demolished.

In each case the districts where these urinals were situate are adequately provided with accommodation.

Plans have been approved for the reconditioning of the urinal in Sackville Street, City, which is intended to be proceeded with during 1936.

The total number of public conveniences under the control of this department is now 146.

The accommodation provided is as follows :—

Males.

Urinal, water-closet, washing, and parcels accommodation..	7
Urinal, water-closet, and washing accommodation	6
Urinal and water-closet accommodation	22
Urinals	81

Females.

Water-closet, washing, and parcels accommodation	10
Water-closet and washing accommodation	9
Water-closet accommodation	11

Permanent attendants are on duty at the conveniences having washing and parcels accommodation, and the cleansing of the other conveniences is effected by a staff of cleaners, each of whom has a district allotted to him.

Details of the initial costs, working expenses, receipts, etc., in connection with public conveniences are given in Table 8, page 407.

Schools.

Visits made to schools during the year numbered 256, and were chiefly with regard to nuisances, drainage work, and closet accommodation.

ATMOSPHERIC POLLUTION.

Smoke Abatement.

The provisions of the Public Health Acts with regard to industrial smoke emission have been administered during the year, and the services of four smoke inspectors with the necessary special knowledge have been utilised for the purpose.

The inspectors' hours of duty are arranged so as to obtain the maximum supervision over the existing chimneys.

The provisions of the Minister of Transport's Regulations under the Road Traffic Act, 1930, with regard to the emission of smoke, grit, ashes, etc., from road locomotives, steam wagons, and vehicles with compression ignition engines, are administered by the Watch Committee in this City, and during the year four offenders were summoned before the Magistrates. In each instance the case was dismissed. Whilst large quantities of smoke of varying densities are emitted from railway locomotives within the City, it is impossible in many cases to assemble evidence necessary to institute legal proceedings.

The provisions of the Manchester Police Act, 1844, with respect to the firing of domestic chimneys are delegated for administrative purposes to the Watch Committee. By the courtesy of the Chief Constable it is learned that during 1935, the number of such cases reported was 1,541, and in 1,538 instances the defendants were fined. The aggregate of fines amounted to £287 3s. 6d.

The Manchester and District Regional Smoke Abatement Committee has continued its work, especially in relation to the classes for the training of stokers and in its advocacy of the establishment of a joint smoke board for the administration of the law relating to smoke emission. The report of the Committee which appears on pages 447 to 457 gives in detail the summarised statement issued in support of the formation of a joint smoke board. It is only desirable here to emphasise the impossibility of clearing the atmosphere of such a widely-spread industrial district as that of East Lancashire, unless the recognised standard of the methods of control are applied throughout the whole area. It is obvious that many areas are not in a position which makes it possible for them to exercise such control, and smoke drifts from such areas over the whole district and makes very serious additions to the smoke pall, which has such definite disadvantages, both with regard to health and to the economic welfare of the people.

Special Enquiry of the City Council on Atmospheric Pollution.

A Special Enquiry was made by the City Council during the year into the possibility of encouraging the use of smokeless fuels. This was raised on a special notice of motion, and the following resolution was adopted by the City Council on the 31st October, 1934, viz. :—

“ That the General and Parliamentary Committee be requested to consider and report upon the desirability and practicability of making available to the public smokeless fuels, including gas and electricity, at such cost (not including a charge upon the rates) in relation to raw coal as will permit their use in preference to coal, and thus make a definite contribution to a cleaner atmosphere.”

The Committee concerned presented its report to the City Council on May 28th, 1935, and the following recommendations were approved :—

1. That the Housing Committee be instructed by the Council, as an experiment, to make provision, say, in 50 Corporation houses for grates to be specially adapted to burn coke instead of coal, and to arrange that for a period of twelve months coke supplied by the Manchester Corporation Gas Department shall be burned in such houses instead of coal. Further, to instruct the Housing Committee, at the expiration of the twelve months' period, to report to the Council, through the General and Parliamentary Committee, upon the results of the experiment from the point of view of efficiency and economy.

2. That the Town Hall Committee be instructed by the Council to carry out, in such offices within the Town Hall as may be found suitable for the purpose, experiments both with the ordinary coke as supplied by the Manchester Corporation Gas Department, and low-temperature fuels supplied by outside firms, and to report to the Council, through the General and Parliamentary Committee, the results of the experiments after they have been in operation for a period of twelve months.

3. That the Gas Committee be instructed by the Council to consider the question of the installation of a plant to produce low-temperature carbonisation fuel and report to the Council, through the General and Parliamentary Committee, on the subject, both from the economic aspect and also from the point of view of stimulating the use of smokeless fuel in the City.

A further appeal was also made to the public generally to experiment with smokeless fuels, and the recommendations to which reference has been made are in progress.

Work of Inspectors.

Details of the work of the smoke inspectors are shown below. It may be noted that 8 of the 57 statutory notices served during the year were in respect of "smoke other than black," and one statutory order was obtained for an emission of this type of smoke. Twelve observations were taken of chimneys situated outside the City boundaries, which resulted in four notices being served. No further action has been found necessary with regard to these notices.

Timed observations taken—684.

Revealing black smoke two minutes and over in half-hour periods	114
Revealing black smoke under two minutes	259
Revealing smoke other than black	11
Not revealing smoke (taken upon complaints)	288
Chimneys situated outside the City boundary	12
Exempted chimneys (included in above)	16
Total amount of black smoke observed in minutes	883.5
Average amount of black smoke observed in minutes (per observation revealing black smoke)	2.24

Observations taken and not included above.

Locomotives on railways	2
Locomotives on highways	16
Special observations not classified	22
Special reports made	83
Number of complaints received from all sources ..	57
Number of visits to works, etc., <i>re</i> smoke abatement.	1,078
Cases reported to Committee	127
Cases in which no action was taken (exempted chimneys).	15
Cases cautioned or excused by Committee	25
Cases reported to other Committees for action	5
Statutory notices served	57
Magistrates' orders to abate nuisance obtained	5
Prosecutions for smoke nuisances	20
Cases in which penalties were imposed	20
Total amount of penalties and costs	£52
Statutory notices expiring without further action	46
Statutory orders lapsing for various reasons	4
Approximate number of chimneys	1,519

Causes to which Smoke Emissions are attributed.

Of the 112 cases reported to the Committee where chimneys (other than exempted chimneys) emitted smoke two minutes or over in the half-hour period, the nuisance was found to be due to the undermentioned causes :—

Bad firing	66
Unsuitable fuel	7
Bad firing and unsuitable fuel.. .. .	15
Firemen having other duties to perform	1
Firemen having other duties to perform combined with bad firing	4
Insufficient boiler plant	2
Structural defects in plant	6
Insufficient boiler plant and structural defects in plant ..	1
Alterations to plant in progress	4
*Accidental causes outside the control of the fireman ..	2
†Causes unknown	4

* Broken firebars, mechanical stoker defects, etc.
 † Observations taken outside the City boundary, where the Inspectors were unable to inspect the steam-raising plant.

Investigation and Measurement of Atmospheric Pollution.

In December, 1935, the Public Health Committee resolved to recommence the observations in connection with atmospheric pollution which were suspended in 1930. Arrangements have been made with the Central Advisory Committee of the Department of Scientific and Industrial Research for the Public Health Department to co-operate in the general observations on atmospheric pollution, and this work is expected to commence in May, 1936.

With this object, soot deposit gauges are to be installed at Baguley Sanatorium, Withington Institution, the Public Health Laboratory (York Place), Philips Park, Oldham Road Cleansing Yard, Booth Hall Hospital, and Heaton Park. Apparatus for measuring the activity of atmospheric sulphur is to be installed at the Public Health Laboratory, Philips Park, and Oldham Road Cleansing Yard.

These arrangements have been made possible by the co-operation of the Parks and Cemeteries Committee and the Cleansing Committee.

FACTORIES AND WORKSHOPS.

Factory and Workshop Act, 1901.

5,793 inspections were made in connection with the cleanliness, ventilation, overcrowding, and structural conditions in workshops, and with regard to means of escape in case of fire and sanitary accommodation in factories and workshops. There were also 4,418 inspections of bakehouses during the year (see page 403).

71 complaints and 263 reports were received from, and 6 complaints and 262 reports were referred to, H.M. Inspector of Factories.

Workshops.

Want of cleanliness and general defects were reported in 58 instances and were dealt with as follows:—

Insanitary Conditions Reported and Cautions Given.

Want of cleanliness	27	
General defects	9	
	—	36

Remedied after Cautions.

Want of cleanliness	29	
(including two cases outstanding from 1934).		
General defects	8	
	—	37

Notices Served.

To cleanse and limewash	18	
To remedy defects	4	
	—	22

Notices Complied with.

To cleanse and limewash	18	
To remedy defects	5	
(including one case outstanding from 1934)		
	—	23

At the end of the year one caution to remedy general defects was outstanding.

One case of non-compliance with notice to remedy general defects was reported to the Committee and legal proceedings were instituted. The case was adjourned and the work subsequently carried out.

	Factories	Workshops	Total
Number on register at end of 1934 ..	3,318	2,173	5,554
Number registered during the year ..	143	113	256
Number discontinued during the year	119	122	241
Number on register at end of 1935 ..	3,405	2,164	5,569

Sanitary Accommodation.

The standard requirements of the Sanitary Accommodation Order, 1903, are administered by virtue of provisions in local Acts.

Eighty-five cases of insufficient or unsatisfactory accommodation in factories, workshops, business premises, etc., were referred to the Chief Technical Assistant for necessary action.

In 18 cases, defects in sanitary accommodation were reported, which were all remedied as a result of verbal cautions by the Inspectors.

Statutory notices were served in three instances, all of which were complied with.

Means of Escape in Case of Fire.

The requirements of the Factory and Workshops Act, 1901, and of the byelaws made thereunder relative to the provision and maintenance of means of escape in case of fire have received attention.

Fifty-two reports of factories and workshops not provided with adequate means of escape in case of fire have been referred to the Technical Section for action.

Statutory certificates were issued on the authority of the Committee in connection with 20 buildings where the means of escape were satisfactory and where such certificates were necessary.

Thirty instances were reported where the means of escape provided were not being adequately maintained. The necessary work was carried out in 29 cases as the result of cautionary letters or verbal cautions, in addition to 10 cases outstanding from 1934.

On five occasions Inspectors found fire escape exits obstructed or emergency doors locked, and the Committee instructed legal proceedings to be instituted. In four instances fines were imposed amounting to a total of £4, the remaining summons being withdrawn. The necessary work was subsequently carried out in all these cases.

The Manchester Corporation (General Powers) Act, 1930, enacts that buildings such as offices, warehouses, flats, hotels, etc., over a certain height above street level shall have fire-escape provision to the upper storeys. 195 such premises were reported to the Technical Section during the year for necessary action under this statute.

Outworkers.

The inspection of premises where outwork is carried out is included in the routine duty of the two female inspectors.

The object is to ensure the work being done under sanitary conditions, and at premises free from infectious disease.

266 Manchester firms employ 1,220 outworkers, of whom 1,036 reside in the City. The remaining 184 are in districts of other local authorities, to whom lists furnishing necessary particulars have been sent.

3,263 inspections of the homes of outworkers have been made. In two instances they were found to be dirty. In four other cases general defects were found. The necessary cleansing and remedial measures were carried out as the result of verbal cautions by the Inspectors.

Generally the standard of cleanliness in outworkers' homes can be considered to be satisfactory, and no case of infectious disease was reported therein.

TABLE NO. 3.
 I.—*Inspection of Factories, Workshops, and Workplaces.*

Premises	Number of		Occupiers prosecuted
	Inspections	Written Notices	
(1)	(2)	(3)	(4)
Factories (including Factory Laundries) ..	2,543	18	..
Workshops (including Workshop Laundries) .	7,668	19	1
Workplaces (other than Outworkers' premises)	467	..	..
Total	10,678	37	1

2.—*Defects found in Factories, Workshops, and Workplaces.*

Particulars	Number of Defects			Number of Offences in respect of which Prosecutions were instituted
	Found	Remedied	Referred to H.M. Inspector	
(1)	(2)	(3)	(4)	(5)
<i>Nuisances under the Public Health Acts*:</i> —		1935 cases	1934 cases	
Want of cleanliness	78	75	5	1
Want of ventilation	2	1	1	..
Overcrowding .. .. .	..	..	..	..
Want of drainage of floors ..	..	..	..	..
Other nuisances.. .. .	29	26	2	..
Sanitary accommodation—				
Insufficient	19	4	8	..
Unsuitable or defective ..	71	49	10	..
Not separate for sexes.. ..	8	2	7	..
<i>Offences under the Factory and Workshops Acts:</i> —				
Illegal occupation of underground bakehouse (S. 101) ..	..	..	..	..
Other offences	97	72	43	5
(Excluding offences relating to outwork and offences under the sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921)				
Total	304	229	76	6
		305		

* Including those specified in sections 2, 3, 7, and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

SHOPS ACTS, 1912 TO 1934.

Number of inspections during 1935	26,736
Number of shops on register, 31st December, 1934	20,195
Number registered during 1935	1,291
Number discontinued during 1935	2,346
Number on register, 31st December, 1935	19,140
Number of cautionary circulars sent to occupiers <i>re</i> failure to exhibit prescribed form <i>re</i> assistants' half-holiday	221
Number of circulars complied with (includes one sent in 1934) ..	222
Number of cautionary circulars sent for failing to exhibit abstract of Acts <i>re</i> employment of young persons	341
Number of circulars complied with	341

Offences reported to Committee.

NATURE OF OFFENCE	COMMITTEE PROCEEDINGS			MAGISTERIAL PROCEEDINGS					
	Number reported	Ordered to be summoned	Cautioned	Summoned	Fined	Ordered to pay costs only	Withdrawn	Dismissed	Amount of Fines
did not exhibit the prescribed form correctly stating the shop assistants' half-holiday	1	1	—	1	1	—	—	—	£ s. d. 0 10 0
employing assistants on weekly half-holiday	4	3	1	3	3	—	—	—	2 5 0
Totals	5	4	1	4	4	—	—	—	2 15 0

Under the provisions of the Shops Act, 1912, every shop must be closed for the serving of customers after 1 p.m. on one week-day in each week unless exemption has been given, or the times of closing have been varied, by orders made under the Act.

Forty-four orders for exemption from compulsory closing or for “fixing the closing day,” or for “fixing the closing hour,” have been made by the City Council as follows:—

*Orders made by the Local Authority under the Shops Act, 1912, for
Exemption from Compulsory Closing.*

Trade or Business	Date when Order of Exemption was made
Antique and Fine Art Dealers	2nd April, 1913
Artificial Flower Dealers	2nd April, 1913
Bassinette, etc., Dealers	2nd July, 1913
Booksellers and Stationers	8th January, 1913
Brush and Basket Dealers	5th March, 1913
Bazaars	2nd July, 1913
Chemists	2nd July, 1913
Drapers	2nd April, 1913
Dress, Costume, and Mantle Dealers	5th February, 1913
Furniture, etc., Dealers	2nd July, 1913
Foreign Stamp Dealers	2nd April, 1913
Furriers.. .. .	5th March, 1913
Grocers and Provision Dealers	7th August, 1912
Glass and China Dealers	2nd April, 1913
Hardware Dealers	5th February, 1913
Hatters	2nd April, 1913
Hosiers and Outfitters	8th January, 1913
Jewellers	8th January, 1913
Knitting Machine Dealers	5th March, 1913
Machinery (Typewriters, etc.) Dealers	1st April, 1914
Music and Musical Instrument Dealers	30th August, 1912
Milliners	2nd July, 1913
Naturalists	2nd July, 1913
Opticians and Instrument Dealers	5th February, 1913
Photographers	2nd July, 1913
Portmanteau, Trunk, Bag, and Fancy Leather Dealers	7th August, 1912
Rubber Goods and Waterproof Dealers	5th March, 1913
Second-hand Booksellers	7th August, 1912
Seeds, Plants, Shrubs, and/or Trees Dealers	5th July, 1933
Theatrical Costumiers	30th August, 1912
Toy and Fancy Goods Dealers	8th January, 1913
Tailors	2nd April, 1913
Umbrella Dealers	2nd April, 1913
Wig Makers, Hair Workers, and Hairdressers' Sundries Dealers	2nd April, 1913

*Orders made by the Local Authority under the Shops Act, 1912, for
“ Fixing the Day ” for the Weekly Half-holiday.*

Trade or Business	Date when Order was made “ Fixing the Day ” for the Weekly Half-holiday	Day Fixed
* Corn and Provender Dealers..	8th January, 1913	Saturday, or (at the option of the shop-keeper), Wednesday
Cloggers	8th January, 1913	
Hairdressers and Barbers.. ..	7th January, 1914	Wednesday, or (at the option of the shop-keeper), Saturday
Pawnbrokers	5th August, 1914	
Boot and Shoe Dealers	3rd February, 1915	
Sale of Meat (other than Pork or Cooked Meat)	14th July, 1920	
Sale of Meat (other than Pork or Cooked Meat), Wythenshawe Area	25th July, 1934 *	

* An Exemption Order has been made in this trade fixing the closing hour on Saturday at 2 o'clock.

*Orders made by the Local Authority under the Shops Act, 1912, for
“ Fixing the Closing Hour ” for the several Days of the Week.”*

Trade or Business	Date when Order was made “ Fixing the Closing Hour ” for the several days of the week	Closing Hour					
		Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Hairdressers and Barbers	21st May, 1924 ..	p.m. 8 0	p.m. 8 0	p.m. 1 0	p.m. 8 0	p.m. 8 0	p.m. 9 0
Boot and Shoe Dealers	28th April, 1915 ..	8 0	8 0	1 0	8 0	9 0	10 30
Sale of Meat (other than Pork or Cooked Meat)	25th October, 1920 .	7 0	7 0	1 0	7 0	8 0	7 0
Sale of Meat (other than Pork or Cooked Meat), Wythenshawe Area	25th June, 1934 ..	7 0	7 0	1 0	7 0	8 0	7 0

Every shop assistant must be allowed a half-holiday once a week. The half-holiday must be given on a week-day and must begin not later than 1-30 p.m. The half-holiday cannot be given in the morning instead of the afternoon.

The employer is also required to put up a notice in his shop stating the day or days on which such assistant is to have his half-holiday.

Specified periods for meals and rest are required to be given to all shop assistants.

The Shops Act, 1934, which became operative 30th December, 1934, is designed to regulate the hours of employment of persons under the age of 18 years who are employed about the business of wholesale or retail shops, or employed elsewhere in connection with wholesale or retail trade or business, and to make provision as to the arrangements in shops and warehouses for the health and comfort of workers. The administration of the Act has been delegated to the Public Health Committee. It limits the normal hours of employment of young persons to 52 hours per week before December, 1936, and afterwards to 48 hours per week. This limitation is exclusive of meal times. Previously the maximum working hours were 74 hours, inclusive of meal times. The statute also prescribes a maximum amount of overtime which an assistant between the ages of 16 and 18 years may be employed, and prohibits overtime entirely in the case of young persons under 16 years of age. The Act applies to three classes of premises :—

- (a) Retail shops.
- (b) Wholesale shops, *i.e.*, where goods are kept for sale by wholesale to customers resorting to the premises.
- (c) Warehouses occupied by retail traders or wholesale dealers.

A wide range of employees is included, comprising all young persons employed in connection with the serving of customers, the receipt of orders, the handling, despatch, collection or delivery of goods, in the clerical work of the shop, in the service or preparation of food in a restaurant, or in carrying messages or running errands, or employed by the occupier in cleansing or maintenance work.

All young persons who work about the business of a shop are regarded as employed, even though they receive no reward for their labour. This covers for example, unpaid learners or members of a shopkeeper's family.

An occupier of a shop is required to keep a record of the hours worked by young persons in his employ. He may either (1) keep a record of the actual hours worked and intervals allowed for meals, etc., or (2) exhibit a notice specifying the daily hours and intervals for meals, in which case he need only keep a record of time worked outside those hours. The records in respect of any year must be preserved in the shop for a period of six months from the end of the year.

Certain prescribed forms and notices are required to be displayed in shops and warehouses where young persons are employed.

Every young person employed more than 25 hours weekly must be given a weekly half-holiday.

It is regrettable that whilst the Shops Acts have regulated and shortened the working hours of numbers of young persons "employed about the business of a shop," there are still many young persons engaged in occupations very similar in character, such as errand boys employed by dry cleaners, boot repairers, and in laundry receiving offices, who have not the benefit of protective legislation.

Section 10 of the Shops Act, 1934, requires that in all retail shops, wholesale shops, and warehouses, in which any persons, whether adults or juveniles, are employed, the following provisions must be made for the health and comfort of the workers :—

- (1) Suitable and sufficient means of ventilation must be provided and suitable and sufficient ventilation maintained.
- (2) Suitable and sufficient means to maintain a reasonable temperature shall be provided, and a reasonable temperature shall be maintained.
- (3) Suitable and sufficient sanitary conveniences shall be provided and maintained.
- (4) Adequate means of lighting to be provided and the premises kept sufficiently lighted.
- (5) Suitable and sufficient washing facilities shall be provided and maintained.
- (6) Suitable and sufficient facilities for taking meals shall be provided and maintained where employees take meals in the shop.

These conveniences and facilities require to be available for the use of persons "in or about the shop."

With regard to (3) and (5) the Local Authority are empowered to grant certificates of exemption where they are satisfied that by reason of restricted accommodation or other special circumstances it is reasonable to grant such certificate, and that suitable and sufficient sanitary conveniences or washing facilities are otherwise conveniently available. This is intended to meet the case of lock-up shops or koisks where it is impossible to install sanitary conveniences or washing facilities, and where satisfactory arrangements can be made for the assistants to use conveniences and washing facilities in the same block of buildings or elsewhere in the immediate vicinity.

The Local Authority is empowered to serve notices upon the owners or occupiers requiring the fulfilment of the requirements specified in section 10.

Power of entry is given for inspection and enquiry to ascertain if the law is being observed, and an Inspector may call for the production of any notices or records required to be kept or exhibited, and may interrogate any assistant either alone or otherwise.

In order to determine standards of heating and ventilation which can be considered reasonable to require in different types of shops, numerous investigations and tests with the Kata-thermometer and other instruments have been carried out during the year at numerous premises, including the following :—

Wholesale Clothing Warehouse.
 Wholesale Sundries Warehouse.
 Furniture Warehouse.
 Public Bazaar.
 Costumier's Shop.
 Drapery Establishments.
 Cycle Accessories Shop.
 Fish and Game Shop.
 Large General Retail Store.
 Small Tobacco Shop with retiring room.
 Small Tobacco Shop without retiring room.
 Railway Kiosk.
 Confectioner's Shop and Cafe.
 Gentlemen's Outfitters.
 Sweet Shop with dwelling-house.

Proposal to Change the Late Day for Closing Shops from Saturday to Friday under the Shops Act, 1928.

As the result of representations by certain trade associations that the City Council, being the Local Authority under the above Act, should make an Order fixing Friday as the late date for closing shops, instead of Saturday, which is the day fixed by the Act, the subject was fully considered by the Public Health Committee, who resolved that the City Council be recommended to make an order altering the late closing day (the day on which shops are closed at 9-0 p.m.) to Friday.

This decision was opposed by market traders and others, and deputations from objectors and supporters were received by the Committee, who subsequently decided to take a post-card poll of shopkeepers with a view to ascertaining their wishes in the matter.

When this had been effected, the Committee reaffirmed their previous decision, which was not ratified by the City Council, and Saturday still remains the late day for closing in the City.

OFFENSIVE TRADES.

In addition to the trades mentioned in section 112 of the Public Health Act, 1875, a number of other businesses are designated offensive trades and placed under the supervision of the Corporation by virtue of a declaratory order duly confirmed by the Minister of Health in accordance with section 51 of the Public Health Acts Amendment Act, 1907. The City Council has also adopted section 44 of the Public Health Act, 1925, which, *inter alia*, gives power to limit any consent to the establishment of an offensive trade for a specified period.

At the end of 1935 the following offensive trades were being carried on at 790 registered premises within the City :—

Blood Boiling	∴	1	Poultry Food Manufacture	∴ ∴	1
Bone Boiling	∴	1	Gut Scraping	∴ ∴ ∴ ∴ ∴	3
Soap Boiling	∴	5	Pickle and Sauce Manufacture	∴ ∴	11
Tallow Melting	∴	3	Rag and Bone Dealing	∴ ∴ ∴	29
Tripe Boiling	∴	6	Rubber Paste or Solution Spreader	∴	12
Fish Curing	∴ ∴	1	Size Making	∴ ∴ ∴ ∴ ∴ ∴	5
Fish Frying	∴ ∴	701	Manure Manufacture	∴ ∴ ∴ ∴	1
Oil Distilling	∴ ∴	3	Fat Melting	∴ ∴ ∴ ∴ ∴ ∴	1
Tanning	∴ ∴	4	Rubber Substitute Manufacture	∴	2

During 1935 the district sanitary inspectors made 2,943 inspections of offensive trades, 2,619 of the visits being in connection with fish-frying establishments.

The inspections of fried fish shops revealed a clean condition generally, though in 30 instances the occupiers were cautioned with regard to want of cleanliness and other defects.

On subsequent inspections all these cautions were found to have been complied with.

The improvement in the standard of fish-frying businesses has continued, and it is to be expected that a more extensive use of gas for frying ranges will occur as a result of the introduction of a two-part tariff by the Gas Committee.

The 324 inspections of other offensive trades revealed a general freedom from nuisance.

Forty-one applications to establish offensive trades were received during the year, viz. :—

Fish frying 27, rag and bone dealing 13, fat melting 1.

Consent for a limited period was granted in the case of six fish-frying and one rag and bone dealing businesses.

One application for permission to establish a rag and bone dealing business is in abeyance, and the remaining 33 applications were refused on the grounds of unsuitability of the site or premises.

Seven offensive trades were established during 1935, and 12 were discontinued, as under :—

Trade	Established	Discontinued
Fish Frying	6	10
Rag and Bone Dealing	1	2
	7	12

Eight applications were received during the year for extension of the period of consent where this had expired.

In each case the business concerned had been carried on without giving rise to nuisance.

The licences were extended for a further period of five years in the case of five fish-frying businesses, one gut-scraping business, and one poultry food manufactory ; whilst one fat-melting establishment was allowed to continue for a further twelve months.

782 observations with regard to effluvium nuisances were made during the year. The rubber substitute factory referred to in the annual report for 1934 has continued to engage the attention of officials of the Public Health Department and H.M. Inspector of Alkali, etc., Works. The processes carried on at the works have now become registerable under the extensions of the Alkali Works Regulation Act, 1906, by the Alkali, etc., Works Order, 1935, and are under the supervision of H.M. Inspector. Experiments in connection with the neutralising plant are being made with a view to total abolition of the nuisance which occasionally arises from the heating of sulphur and vegetable oils for dark rubber substitute production and the action of sulphur chloride on oil for making light rubber substitute.

The suppression of nuisances from these works is important in view of the close proximity of the rehousing site known as West Gorton Clearance Area.

A serious effluvium nuisance emanating from premises in Ancoats has been dealt with during the year. At these works a process is operated for recovery of copper and solder from old motor car radiators. Complaints having been

received of obnoxious smells emanating from these works, observations were taken and investigations made. It was ascertained that the old radiators were placed in a gas-heated furnace, which caused the solder to melt and the copper tubes to become detached.

During this process, and also during the withdrawal of the residual products from the furnace, offensive and irritant gases were given off. Representations were made to the firm with regard to the nuisance, with the result that a firm of engineers were called in to design a new smelting plant, with condensing apparatus to deal with the gases generated. Since the installation of this plant frequent observations have been taken but on no occasion has any nuisance been reported.

TIPS.

There are 54 tips in the City, 11 belonging to the Cleansing Department, 7 to other Corporation departments, and 36 owned by private firms. This is a decrease of 4 compared with the previous year, two tips belonging to the Cleansing Department and two owned by private firms having been discontinued.

No new tips have been commenced.

To maintain freedom from nuisance, strict supervision is essential over all tips. They are regularly inspected by the district inspectors, and prompt measures are taken when nuisances occur.

170 inspections were made during the year at Corporation tips, and 454 at privately-owned tips.

Unsatisfactory conditions were reported on fourteen occasions at Corporation tips and on sixteen occasions at privately-owned tips. All were subsequently reported to be satisfactory as the result of cautionary letters being sent, or verbal cautions being given to the owners.

Consolidation of the surface of Randolph Street tip with sand and soil to keep down the subterranean fire has been in progress by the drainage section of the department for many years. This work was completed in November, 1935, at a total cost of £743.

STABLES.

Systematic inspections have been carried out at all stables with a view to the premises being kept free from nuisance, and to ensure proper storage and removal of manure.

There are 940 stables in the City affording accommodation for 4,298 horses, and 34 ponies and donkeys. These figures show a decline compared with previous years, and successive decreases are contemplated in view of the development of commercial motor transport.

Fifteen new stables were registered during 1935 and 50 were discontinued.

The following table indicates the extent of the decrease in stables and animals since 1930. :—

	1930	1931	1932	1933	1934	1935	Total decrease since 1930
Stables	1,187	*1,109	1,070	1,024	975	940	247
Horses	6,153	5,104	4,342	4,462	4,582	4,298	1,855
Ponies and donkeys..	60	56	53	47	57	34	26

* Includes 19 stables which were added by the inclusion of Wythenshawe in the City in 1931.

5,250 inspections were made during the year. With few exceptions, the premises were found to be satisfactory and in accordance with the byelaws.

Seven stables were reported to be structurally unsuitable for use as stables, and notices were served to discontinue the keeping of animals.

These notices were complied with in six instances, and in the remaining case action has been deferred subject to certain repairs being effected. One notice outstanding at the end of 1934 has since been complied with.

Defects were found at eight other stables, and notices were served. At four stables the notices have been complied with, two stables have been vacated, and in the two remaining cases the work was outstanding at the close of the year.

Notices were served on 14 occupiers of stables for the removal of manure, all of which were complied with.

In 61 cases where dirty conditions were found, or the removal of manure neglected, verbal cautions were given, and on subsequent visits the premises were reported to be satisfactory.

CANAL BOATS.

The registration and inspection of canal boats plying on approximately 11½ miles of waterway in the City have received attention.

1,132 inspections have been made during the year, and the boats were found to be in a cleanly condition. 43 infringements of the Canal Boats Acts and Regulations were reported and action was taken as follows :—

Infringements With Respect to	Number Reported	Action Taken			
		Cautioned by Inspector	Included in Notices	Cautions complied with	Complied with after Notice
Certificates incorrect or missing	6	2	4	2	3
Markings on boats incorrect, defaced, or obliterated	6	2	4	1	3
Overcrowding	7	3	4	1	4
Non-separation of sexes.. .. .	1	1	—	1	—
Boats requiring painting	14	—	14	—	10
Boats in disrepair	10	—	10	—	8
Totals	44	8	36	5	28

Notices were served for 36 infringements at 30 boats. They were complied with in the case of 28 infringements at 25 boats. Five notices were outstanding at the end of the year.

Notices were outstanding at the close of 1934 in connection with eight boats. In seven cases the notices have been complied with, and the remaining one cannot be enforced as the boat has been taken out of commission.

No case of infectious disease has been reported.

Four boats have been registered during the year, and 35 removed from the register.

There are now 217 boats on the register, of which 209 are horse drawn, six propelled by motor (oil), and two propelled by steam.

The following table indicates the rate of decline in the number of canal boats :—

1930	1931	1932	1933	1934	1935
321	313	313	279	248	217

REMOVAL OF INFIRM AND DISEASED PERSONS.

The provisions of the Manchester Corporation (General Powers) Act, 1930, enable the Justices to grant an order on the certificate of the Medical Officer of Health that a person is infirm or diseased and is incapable of taking care of himself, and is not receiving proper care and attention from others. The order provides for compulsory removal to hospital of the person concerned.

Eleven cases of infirm persons were reported during 1935. Five were persuaded to enter hospitals and five others are being kept under observation as some improvement has been effected in the conditions.

It was necessary in one case to apply to the Justices for an order for compulsory removal of a man to hospital. This man was 74 years of age, bedfast, and not in receipt of proper care and attention. The order was granted and the patient subsequently removed to Crumpsall Hospital.

With regard to eight outstanding cases from previous years, two have died, one has been removed to a nursing home, and one to hospital, whilst three are still being kept under observation. In one case it has been decided to take no further action.

In all cases the necessary arrangements were made for the cleansing of the houses.

EXHUMATIONS.

Exhumations have been supervised in accordance with Home Office regulations, which require the work to be carried out in a proper manner and with due care and decency.

It has been necessary to effect exhumations at St. Patrick's Churchyard, Livesey Street, owing to the site being required for an enlarged edifice.

During the progress of the work, the remains of 716 persons were exhumed and re-interred at St. Joseph's Cemetery, Moston.

Six other exhumations took place at city cemeteries, the bodies being re-interred in other portions of the cemeteries.

RAG FLOCK ACTS, 1911-1928.

Despite the difficulties associated with the administration of these statutes, efforts have been made to ensure the cleanly condition of rag flock used in the manufacture of bedding, upholstery, and cushions.

The subject of unclean flock was dealt with at some length in my annual report of 1934, and although conferences have taken place between the Federation of Bedding and Allied Trades and the Association of Municipal Corporations to consider representations being made to the Ministry of Health with a view to amended legislation, the rate of progress appears to be very slow.

Jute wadding containing a high chlorine count is still being made in large quantities, and we have strong reason to believe that much of it is partially composed of old sacking which has not undergone any washing, cleansing, or sterilisation. The disintegrating process has now reached such a high state of perfection that it is impossible in many instances to demonstrate beyond the possibility of doubt that the product has been manufactured from fabric, though it is well known that some of the firms making this article are using large quantities of old sacking.

New legislation to deal with this difficulty, as indicated in previous annual reports, would greatly facilitate the work.

The most satisfactory method of ensuring cleanly rag flock is to intensify the inspection at the source of manufacture. Unfortunately, inaction on the part of some sanitary authorities enables unscrupulous flock manufacturers to place material in the market which, though filthy, cannot be proved to be rag flock, and there are at present no standards of cleanliness for any filling material other than rag flock. In such cases it is useless to institute legal proceedings as the onus is on the prosecution to prove not only that the sample which has been obtained contains an excess of chlorine over the prescribed limit, but that it has been derived wholly or partially from fabricated material.

Invaluable assistance has been rendered by Professor Morton, Head of the Textile Department of the College of Technology, and by certain trade experts, in cases where prosecutions have been instituted. Without that assistance it would have been impossible to combat the weight of evidence brought by the defence to prove that the samples before the Court were not from fabricated material.

One important case occupied the Court for several days. The material in question was jute wadding and was manufactured outside Manchester. Large quantities were being used in the manufacture of wadded quilts by a Manchester firm. The chlorine content was 1,080 parts per 100,000 parts, as compared with the prescribed limit of 30 parts per 100,000 parts. It was proved finally that the origin of the material was dirty old bagging in which cotton had been imported into this country and that it had undergone no cleansing process. The penalties and costs amounted to £44.

Statement of Action under the Rag Flock Acts.

Visits to premises where rag flock is made, used, or likely to be used	815
Statutory samples obtained	109
Samples which conformed to the prescribed standard of cleanliness	85
Samples which failed to conform to the prescribed standard of cleanliness	24
Cases reported to Committee	24
Offenders cautioned by Committee	8
Cases not proceeded with because of insufficient evidence to prove that the material had been woven, knitted, or felted	8
Prosecutions instituted	8
Offenders fined	4
Case withdrawn	1
Cases outstanding at end of year	3
Total fines and costs	£69 16s. od.
Number of premises in the City where rag flock is made ..	2
Number of known premises in the City where rag flock may be used in the manufacture of:—	
Bedding	59
Upholstery	117
Cushions	20
Total	196

Fabrics (Misdescription) Act, 1913.

Forty-five visits were made under the provisions of this Act, but no samples were purchased as in no case would the shopkeeper declare the material to be safe and non-inflammable.

Poisons and Pharmacy Act, 1908.

Twenty-nine licences have been renewed and three new licences have been granted under the Act and the regulations made in connection therewith.

Complaints and Departmental References.

Complaints and references to this section of the department total 9,483. Of these, 6,703 were from private sources, the remainder being shown as under :—

References from	Department, etc., concerned	References to
2,430	Other departments of the Corporation	3,459
334	H.M. Inspector of Factories	268
15	Other local authorities	60

Reports with regard to 140 streets, roads, and passages requiring paving were referred to the Highways Committee by the Sanitary Sub-Committee, and notification of the paving of 67 streets, etc., was received from the former Committee.

Student Sanitary Inspectors and Health Visitors.

In accordance with the arrangements approved by the Public Health Committee, the department continues to afford facilities for training in practical sanitary inspection to student sanitary inspectors and health visitors who wish to qualify for the examination of the Royal Sanitary Institute.

During the year eight student sanitary inspectors and seventeen student health visitors were given practical training by the inspectorial staff.

TABLE No. 4.
NUMBER OF INSPECTIONS AND VISITS.

Primary inspection of dwelling-houses under Housing Act, 1925	7,247	}	98,925
Subsequent inspections of dwelling-houses under Housing Act, 1925	..	..	..	..	..	8,063
Inspections by Housing Inspectors—Clearance Areas	..	..	..	..	..	2,475
Visits <i>re</i> removals, disinfection, etc., from Clearance Areas	..	..	..	..	..	2,918
Visits <i>re</i> fumigation of houses in Clearance Areas	..	..	..	..	..	1,556
Visits <i>re</i> demolition of houses in Clearance Areas	..	..	..	..	..	1,209
Primary inspections of dwelling-houses under Public Health Acts	11,207	}	..
Subsequent inspections of dwelling-houses under Public Health Acts	..	..	..	..	..	26,545
Primary inspections of infected dwelling-houses	..	..	..	..	..	4,556
Subsequent inspections of infected dwelling-houses	..	..	..	..	..	1,974
Inspections of dwelling-houses <i>re</i> Tuberculosis	..	..	..	..	..	13,536
Other visits <i>re</i> Tuberculosis	..	..	..	..	..	3,849
Visits <i>re</i> contacts—Infectious diseases	..	..	..	..	..	397
Houses-let-in-lodgings	..	..	..	..	..	8,353
Tents, vans, sheds	..	..	..	..	..	645
Homes of outworkers	..	..	..	..	..	3,263
Canal boats	1,132	}	Dwelling-houses
Bakehouses	..	..	..	..	..	4,418
Food preparation premises	..	..	..	..	..	883
Restaurant, etc., kitchens	..	..	..	..	..	467
Butchers' shops and bacon stores	..	..	..	..	..	654
Offensive trades—Fish fryers	..	..	..	..	..	2,619
Offensive trades—Other than fish fryers	..	..	..	..	..	324
Observations <i>re</i> effluvium nuisances	..	..	..	..	..	782
Rag and bone dealers' barrows	..	..	..	..	..	26
Works boiler plant <i>re</i> smoke abatement	..	..	..	..	..	1,078
Refuse tips—Corporation	170	}	77,224
Refuse tips—Private	..	..	..	..	..	454
Markets	..	..	..	..	..	48
Stables	..	..	..	..	..	5,250
Piggeries	..	..	..	..	..	172
Slaughterhouses	..	..	..	..	..	6
Poultry killing premises	..	..	..	..	..	36
Sanitary accommodation at schools	..	..	..	..	..	256
Sanitary accommodation at parks	..	..	..	..	..	1,365
Land	..	..	..	..	..	617
Watercourses	38	}	Total
Streets, passages, roadways, and footpaths	..	..	..	..	..	1,988
Exhumations	..	..	..	..	..	6
Factories	..	..	..	..	..	2,543
Workshops	..	..	..	..	..	3,250
Shops	..	..	..	..	..	26,736
Premises in connection with Rag Flock Act	..	..	..	..	..	815
Wholesale margarine dealers' premises	..	..	..	..	..	120
Artificial cream manufacturers	..	..	..	..	..	6
Other business premises	..	..	..	..	..	3,405
Cesspools	152	}	..
New buildings (to test drains)	..	..	..	..	..	2,624
Drains tested by water	..	..	..	..	..	4,212
Percolations investigated	..	..	..	..	..	71
Visits in connection with Fabrics Misdescription Act	..	..	..	..	..	45
Public conveniences	..	..	..	..	..	1,228
Miscellaneous visits	10,360	}	Total
Total	..	..	..	..	..	176,149

NOTE.—In addition to the above inspections and visits, 174,010 houses were inspected during the overcrowding survey.

TABLE NO. 5.—SHOWING WORK DONE AFTER LETTER OR INFORMAL NOTICE HAS BEEN ISSUED.

Nature of Work	Letters or Informal Notices issued		Complied with*	
	Letters, etc.	Premises	Letters, etc.	Premises
General repairs to dwelling-houses	1,460	3,365	1,264	3,022
Urgent defects at dwelling-houses which have been ordered to be closed or on list for the consideration of the Committee ..	2,499	3,896	2,075	3,068
Cleansing of walls, floors, bedding, etc., and of verminous houses..	26	26	26	26
Abate overcrowding at dwelling-houses	66	66	3	3
Failing to afford facilities to inspect premises	72	72	64	64
Failing to inscribe the name and address of the Medical Officer of Health and/or Landlord in the rent book	36	83	32	59
Provision, repair, and reconstruction of drains	14	23	12	21
Provision of sub-soil drains	1	1	2	2
Failing to afford facilities for inspection, etc., of drains covered in without inspection	4	4	4	4
Provision or repairs to downspouts and eavesgutters	1	1	2	2
Repairs to water-closets	61	69	58	65
Provision or renewal of ashbins ..	272	282	229	237
Removal of deposits causing dampness	1	1	1	1
Paving, flagging, or repair of yard surfaces	1	1	6	17
Paving, flagging, or repair of passage surfaces	37	104	20	52
Repairs to stables	1	1	2	2
Removal of offensive deposits ..	30	39	18	27
Repairs to means of escape in case of fire at factories and workshops	15	15	21	21
Failing to exhibit in shops the prescribed form in respect to the assistants' half-holiday	221	221	222	222
Failing to exhibit in shops the abstract of the Acts in respect of employment of young persons ..	341	341	341	341
Abate nuisances at tips	11	..	11	..

* Includes some letters, etc., issued in 1934.

Where the work required in letters or informal notices has not been carried out, statutory notices have since been served.

TABLE No. 6.

SHOWING STATUTORY NOTICES SERVED AND COMPLIED WITH UNDER THE
PUBLIC HEALTH, HOUSING, FACTORY AND WORKSHOP ACTS, AND THE
VARIOUS LOCAL ACTS AND BYELAWS.

Work Specified	Number of Notices Served		*Number of Notices Complied with	
	Notices	Premises	Notices	Premises
Repairs to dwelling-houses	652	956	609	844
Provision, repair, and reconstruction of drains	419	537	379	499
Repairs to waterclosets and chambers ..	201	245	188	220
Provision of adequate closet accommodation	3	3	3	3
Provision of ashbins	26	26	39	40
Provision or repairs of downspouts and eavesgutters	244	288	242	289
Paving, flagging, or repairing of yard surfaces	270	495	281	506
Paving, flagging, or repairing of passage surfaces	268	1,146	283	1,169
Cleansing and limewashing of dwelling- houses	31	31	28	28
Houses-let-in-lodgings—				
To furnish particulars	219	219	214	214
To provide additional water-closet accommodation .. .. .	..	..	1	1
To provide water supply and sinks ..	22	22	23	23
To provide ventilation to rooms, stair- cases, and passages	19	19	18	18
To provide ventilation to food cupboard	1	1	..	..
To cleanse ceilings and walls—farmed houses	163	163	153	153
Repairs to canal boats	30	30	25	25
Discontinue keeping animals—other than - horses or swine	2	2	1	1
Repairs to stables and provision of manure- steads	8	8	4	4
Discontinue using premises as stables.. ..	16	7	13	6
Removal of manure	14	14	14	14
Removal of offensive accumulators	69	59	62	52
Provision of means of escape in case of fire at factories and workshops	18	18	14	14
Cleansing and limewashing of workshops ..	18	18	18	18
Remedy defects in workshops and bakehouses	6	6	7	7
To prevent the emission of smoke from chimneys of premises other than dwelling- houses	57	..	46	..

* Includes some notices served in 1934.

TABLE No. 7.
SHOWING OFFENCES REPORTED TO THE COMMITTEE AND SUBSEQUENT ACTION.

OFFENCE	COMMITTEE PROCEEDINGS							PROSECUTIONS						
	Cases Reported	Notices ordered to be Served	Ordered to be Summoned	Work done of Summons before issue of	Cautioned or Excused	Reported to other Committees	Number Summoned	Number Fined	Ordered to Pay Costs only	Magistrates' Orders granted	Withdrawn	Dismissed	Amount of Fines £ s. d.	Amount of Costs £ s. d.
Neglecting to repair houses after notice	155	..	155	140	..	..	15	5	..	5	5	..	6 0 0	3 5 0
Neglecting to provide downspouts after notice	44	..	44	41	..	..	3	3	..	..	..	..	4 5 0	..
Neglecting to provide privies, water-closets, etc., after notice	18	..	18	14	..	..	4	4	..	..	..	..	5 0 0	..
Houses-let-in-lodgings—														
Dirty walls, floors, or bedding	8	..	8	2	1	..	5	4	..	..	1	..	2 10 0	..
Overcrowding or mixing of sexes	8	..	8	3	2	..	3	1	1	..	..	1	0 5 0	0 12 0
Neglecting to cleanse and limewash after notice (farmed houses)	6	..	6	3	..	..	3	3	..	..	..	..	3 0 0	..
Neglecting to provided adequate means of ventilation (farmed houses)	4	..	4	4	..	..	..	..	..	..	..	..	..	..
Neglecting to provide watercloset accommodation, etc., after notice	1	..	1	1	..	..	..	..	..	..	..	..	..	..
Neglecting to provide water supply and sinks after notice	18	..	18	18	..	..	..	..	..	..	..	..	..	..
Failing to furnish particulars	41	..	41	41	..	..	..	..	..	..	..	..	..	..
Using unregistered rooms for sleeping	2	..	2	2	..	..	..	..	..	..	..	..	..	..
Refusing to allow inspection	2	..	*1	..	1	..	..	..	..	..	..	..	..	..
Neglecting to cleanse houses after notice	6	..	6	3	1	..	2	..	..	2	..	..	..	0 16 0
Neglecting to provide sub-soil drains after notice	1	..	1	1	..	..	..	..	..	..	..	..	..	..
Not having the name and address of M.O.H. inscribed in the rent book as required by sec. 5, Housing Act, 1925	1	..	1	1	..	..	..	..	..	..	..	..	..	..
Not having the name and address of the owner inscribed in the rent book as required by sec. 5, Housing Act, 1925	3	..	3	3	..	..	..	..	..	..	..	..	..	..
Neglecting to remove accumulations of offensive matter after notice	24	..	24	23	..	..	1	..	..	..	1	..	..	..
Neglecting to comply with byelaws re rents, vans, etc.	7	..	7	7	..	..	..	..	..	..	..	..	..	..
Neglecting to remove accumulations of manure	3	..	3	3	..	..	..	..	..	..	..	..	..	..
Neglecting to discontinue using stables after notice	1	..	1	1	..	..	..	..	..	..	..	..	..	..
Refusing Inspector admission to premises after application	1	..	1	..	..	..	1	..	..	1	..	..	..	..
Refusing Inspector admission to premises after Order of Justices	1	..	1	..	..	..	1	1	..	..	..	..	2 0 0	..
Neglecting to maintain means of escape in case of fire in factories and workshops in a satisfactory condition	5	..	5	..	..	..	5	4	..	..	1	..	4 0 0	..
Did not exhibit prescribed form correctly stating the assistants' weekly half-holiday	1	..	1	..	..	..	1	1	..	..	..	..	0 10 0	..
Employing assistants on weekly half-holiday	4	..	3	..	1	..	3	3	..	..	..	..	2 5 0	..
Neglecting to cleanse dirty bakehouse after caution	1	..	1	..	..	..	1	1	..	..	..	..	2 0 0	..
Allowing smoke to be emitted from chimneys of premises other than dwelling-houses	62	57	..	..	..	5	..	..	..	..	..	..	..	..
Allowing smoke to be emitted from chimneys of premises other than dwelling-houses after notice	5	..	5	..	..	..	5	..	..	5	..	..	..	2 0 0
Neglecting to comply with Magistrates' Orders to abate nuisance from smoke	45	..	20	..	25	..	20	20	..	..	1	..	50 0 0	..
Infringements of Rag Flock Acts, 1911 and 1928	24	..	8	..	16	..	†8	4	..	..	..	..	11 0 0	58 16 0

* No proceedings were taken as the offender had removed before the summons was issued.

† Three cases had not been heard by the Magistrates at the end of 1935.

TABLE No. 8.

SHOWING THE AMOUNTS RECEIVED FOR USE OF THE UNDERGROUND, ETC., CONVENIENCES, AND THE WORKING EXPENSES, ETC., DURING THE FINANCIAL YEAR ENDED 31ST MARCH, 1936.

SITUATION OF CONVENIENCE	Cost of Construction	Wages and Clothing	Electricity, Gas, Water, Repairs, etc.	Amount received for Use of Water closets	Amount received for Use of Lavatories	Amount received for Left Parcels	Amount received from Sale of Sanitary Towels and Chemists' Sundries	Commission on Receipts from Weighing Machines	Total Receipts	Total Expenditure	Surplus	Deficit
Albert Square .. { Males Females	£ s. d. 2299 7 10 2730 6 11	£ s. d. 352 1 4 263 1 3	£ s. d. 64 9 9 96 4 6	£ s. d. 119 0 7 149 16 0	£ s. d. 28 11 10 5 8 2	£ s. d. 13 1 10 2 13 4	£ s. d. .. 2 2 6 2 2	£ s. d. 6 18 10 1 15 1	£ s. d. 167 13 1 165 14 9	£ s. d. 416 11 1 359 5 9	£ s. d.	£ s. d. 248 18 0 193 11 0
Victoria Buildings (Females) ..	630 6 10	611 12 0	145 15 7	542 0 2	37 8 10	136 11 8	32 15 10	8 8 1	757 4 7	757 7 7	..	0 3 0
Piccadilly { Females Males	887 12 9 1384 14 5	354 11 0 700 15 8	215 3 5 286 17 6	842 11 1 556 14 8	46 16 10 154 8 8	64 17 8 212 7 2	22 4 2 ..	8 0 4 89 12 4	984 10 1 1013 2 10	569 14 5 987 13 2	414 15 8 25 9 8	....
Market Place (Males)	1035 9 5	424 16 4	148 3 4	243 3 0	55 7 10	..	..	8 9 6	307 0 4	572 19 8	..	265 19 4
South Street (Males)	1615 7 6	406 6 11	96 2 3	69 7 3	17 6 10	..	..	7 5 1	93 19 2	502 9 2	..	408 10 0
Great Bridgewater St. (Males).	1711 18 9	424 16 4	135 4 0	139 0 6	45 13 6	..	..	21 18 1	206 12 1	560 0 4	..	353 8 3
Victoria Street (Males)	2196 15 3	447 6 0	147 12 4	170 7 3	47 19 6	81 19 8	..	11 8 6	331 4 11	594 18 4	..	263 13 5
New Cross { Females Males	1615 5 5 1755 5 1	263 1 3 447 6 0	86 14 7 92 6 2	113 0 11 107 7 4	6 9 0 26 9 8	3 4 0 ..	7 7 10 ..	0 18 6 13 17 9	131 0 3 147 14 9	349 15 10 539 12 2	.. ..	218 15 7 391 17 5
Stevenson Square { Females Males	1605 16 11 1724 16 11	263 1 3 447 6 0	101 0 8 130 15 6	203 5 7 144 2 6	8 7 6 31 1 10	14 17 4 55 10 4	13 6 8 ..	1 14 11 8 9 7	241 12 0 239 4 3	364 1 11 578 1 6	.. ..	122 9 11 338 17 3
Blackley { Females Males	959 8 9 1026 12 9	.. 420 3 3	46 14 11 67 16 4	.. 14 9 7	.. 2 1 2	.. 0 9 6	.. ..	.. 3 6 0	30 0 0 20 6 3	46 14 11 487 19 7	.. ..	16 14 11 467 13 4
Corporation Street (Males) ..	2364 10 9	424 16 4	93 3 10	39 4 7	8 5 6	3 10 2	..	3 4 8	73 14 11	518 0 2	..	444 5 3
Withington (Females)	267 14 6	268 8 2	47 19 4	53 12 9	1 8 10	5 2 0	2 11 4	0 9 4	63 4 3	316 7 6	..	253 3 3
Lloyd's Hotel, Chorlton-cum-Hardy (Males) .. ..	..	11 16 4	14 7 3	6 5 5	..	..	..	..	6 5 5	26 3 7	..	19 18 2
Shudehill (Males)	1631 9 3	402 6 8	125 7 11	83 13 10	16 8 4	11 4 0	..	3 11 3	114 17 5	527 14 7	..	412 17 2

(Continued.)

TABLE NO. 8—continued

SITUATION OF CONVENIENCE	Cost of Construction	Wages and Clothing	Electricity, Gas, Water, Repairs, etc.	Amount received for Use of Water closets		Amount received for Use of Lavatories	Amount received for Left Parcels		Amount received from Sale of Sanitary Towels and Chemists' Sundries		Commission on Receipts from Weighing Machines		Total Receipts		Total Expenditure	Surplus	Deficit
				£	s. d.		£	s. d.	£	s. d.	£	s. d.	£	s. d.			
Longsight (Males)	260 14 1	43 12 11	10 10 3	29 2 5	..	..	..	..	..	..	4 3 0	..	33 5 5	54 3 2	..	20 17 9
Ardwick Green (Females) ..	605 10 7	258 8 2	43 14 5	66 11 4	4 18 8	2 5 10	3 5 8	0 17 1	..	..	..	..	77 18 7	302 2 7	..	224 4 0
Gorton Lane .. { Females { Males	403 19 8	258 8 2 30 12 11	32 14 1 30 19 5	9 14 11 12 13 5	0 4 2 ..	..	..	..	..	..	..	..	60 15 4 12 13 5	291 2 3 61 12 4	..	230 6 11 48 18 11
Moston Lane .. { Females { Males	461 9 0	20 12 1 20 12 1	24 7 0 20 8 2	2 17 2 ..	..	..	..	..	..	..	..	..	2 17 2 ..	44 19 1 41 0 3	..	42 1 11 41 0 3
Southern Cemetery { Females { Males	811 17 4	27 2 1 27 2 1	17 6 11 16 2 1	20 18 6 8 16 7	..	..	..	..	..	..	6 18 0	..	20 18 6 15 14 7	44 9 0 43 4 2	..	23 10 6 27 9 7
Barlow Moor Road { Females { Males	540 0 0	84 8 6 84 8 6	63 19 0 63 18 11	25 0 2 16 13 7	..	..	..	..	..	..	0 18 9 6 11 1	..	25 18 11 23 4 8	148 7 6 148 7 5	..	122 8 7 125 2 9
f Levenshulme .. { Females { Males	499 0 7	258 8 2 39 14 11	88 14 1 28 1 2	37 2 11 12 18 7	0 8 6 ..	3 2 8	1 18 4	..	..	..	0 7 8 7 8 11	..	83 0 1 20 7 6	347 2 3 67 16 1	..	264 2 2 47 8 7
e Gorton Town Hall (Females)	550 0 0	168 8 9	25 6 5	44 7 9	0 16 10	..	1 0 0	..	..	..	1 12 8	..	47 17 3	193 15 2	..	145 17 11
Gorton Town Hall (Males) ..	820 0 0	26 5 1	17 3 10	28 18 4	..	..	..	..	..	..	5 10 9	..	34 9 1	43 8 11	..	8 19 10
North Road (Females)	521 4 9	33 12 1	19 11 10	4 13 9	..	..	..	..	..	..	0 11 7	..	5 5 4	53 3 11	..	47 18 7
Queen's Road .. { Females { Males	1110 1 10	33 12 1 20 12 1	12 3 0 28 1 3	15 8 8 16 10 11	..	..	..	..	..	..	1 6 1 8 10 6	..	19 14 9 25 1 5	45 15 1 48 13 4	..	23 0 4 23 11 11
West Point .. { Females { Males	1288 13 7	30 7 1 30 7 1	9 7 5 10 8 4	22 9 8 12 4 5	..	..	..	..	..	..	0 15 3 7 1 8	..	23 4 11 19 6 1	39 14 6 40 15 5	..	16 9 7 21 9 4
g Kitchen Bank (Females) ..	776 7 4	258 8 2	53 4 8	25 17 7	0 10 2	0 13 10	1 1 6	..	..	..	..	..	42 14 1	311 12 10	..	268 18 9
Dean Lane .. { Females { Males	1121 0 0	258 8 2 20 12 1	34 11 11 19 7 0	25 8 9 6 7 10	0 10 0 ..	0 14 4	1 13 6	..	..	..	1 3 4 ..	..	28 9 11 9 7 10	293 0 1 39 19 1	..	263 10 2 30 11 3

(Continued.)

SITUATION OF CONVENIENCE	Cost of Construction	Wages and Clothing	Electricity, Gas, Water, Repairs, etc.	Amount received for Use of Water closets	Amount received for Use of Lavatories	Amount received for Left Parcels	Amount received from Sale of Sanitary Towels and Chemists' Sundries	Commission on Receipts from Weighing Machines	Total Receipts		Total Expenditure		Surplus		Deficit	
									£	s. d.	£	s. d.	£	s. d.	£	s. d.
Wellington Hotel, Didsbury (Males)	86 4 1	11 16 4	4 14 11	5 3 2	..	..	..	..	5 3 2	16 11 3	..	..	11 8 1	..	..	..
Cheetham { Females { Males	1573 2 1	258 8 2 420 3 3	45 12 4 45 12 5	22 9 4 14 19 9	0 11 6 2 2 10	..	1 7 10 ..	2 1 6	24 8 8 19 4 1	304 0 6 466 15 8	..	..	279 11 10 447 11 7	..	..	..
Knott Mill (Females)	861 2 0	258 8 2	35 12 11	19 8 3	0 10 2	..	2 16 8	..	22 15 1	294 1 1	..	..	271 6 0	..	..	..
Northenden { Females { Males	545 0 0	25 6 8 25 6 8	8 12 7 17 17 6	27 15 10 11 7 1	..	..	..	1 8 5 4 19 9	29 4 3 16 6 10	33 19 3 43 4 2	..	..	4 15 0 26 17 4	..	..	..
Alexandra Park { Females { Males	1560 2 1	258 8 2 24 10 1	36 15 0 7 7 2	21 16 3 15 5 10	0 7 8 ..	..	1 2 0 ..	..	23 5 11 15 5 10	295 3 2 31 17 3	..	..	271 17 3 16 11 5	..	..	..
Butler Street { Females { Males	2392 10 8	258 8 2 420 3 3	31 8 8 33 1 1	9 18 7 9 4 2	0 6 2 1 1 6	..	0 15 2 ..	5 19 9	10 19 11 16 5 5	289 16 10 453 4 4	..	..	278 16 11 436 18 11	..	..	..
Midway Hotel, Longsight (Males)	247 2 4	11 16 4	7 18 8	5 3 4	..	..	..	..	5 3 4	19 15 0	..	..	14 11 8	..	..	..
Openshaw { Females { Males	1255 8 1	258 8 2 20 12 1	39 1 2 10 3 8	20 3 1 7 6 0	0 2 5 ..	..	0 11 2 ..	3 6 3	20 16 11 10 15 3	297 9 4 30 15 9	..	..	276 12 5 20 0 6	..	..	..
h Seymour Grove, { Females Chorlton-cum-H. { Males	729 9 6	33 12 1 20 12 1	8 9 9 14 13 11	10 15 11 7 15 2	..	..	..	..	10 15 11 7 15 2	42 1 10 35 6 0	..	..	31 5 11 27 10 10	..	..	..
Denmark Road { Males { Females	1260 5 1	20 12 1 258 8 2	9 10 7 41 0 4	19 6 2 22 18 4	0 9 2 ..	..	0 19 6 ..	5 15 7 ..	25 1 9 24 7 0	30 2 8 299 8 6	..	..	5 0 11 275 1 6	..	..	..
Public Urinals .. .. .	..	2357 12 6	903 6 6	..	..	..	..	8 14 7	8 14 7	2960 19 0	..	..	2952 4 5	..	..	..
Proportion of Cost of Main- tenance of Joint Tram Shelters, etc., received from Transport Department ..	..	..	..	..	..	..	..	..	107 8 5	..	..	107 8 5	..	..	..	..
Proposed of Cost of Main- tenance of Public Conveni- ences, Seymour Grove, received from Salford M.B. .. .. .	..	..	..	..	..	..	..	..	29 8 4	..	..	29 8 4	..	..	..	..
Sundry Receipts .. .. .	..	..	..	..	..	..	..	..	81 19 3	..	..	81 19 3	..	..	..	..
TOTALS	4723 4 8	13610 7 9	4113 19 6	4295 19 6	552 13 10	612 5 4	100 19 4	285 10 0	6240 11 3	17724 7 3	659 1 4	12142 17 4	..	..	..	..

a Reopened after reconstruction 36 35.
b This convenience was let with shop at a rental of £30 per annum and rates, the Public Health Committee undertaking to pay for gas, water, and electricity.
c Transport Committee pay 7s. 6d. per week for privileges extended to Transport employees.
d Includes £50 10s. 3d. rent received for portion of premises.
e Transport Committee pay half cost of construction (except Barlow Moor Road Conveniences, the amount stated being the cost apportioned to the Public Health Committee) and working expenses, and receive half receipts.
f Includes £40 rent received for portion of premises.
g Includes £14 11s. 6d. rent received for portion of premises.
h Salford M. B. pay half cost of construction and maintenance and receive half receipts.

SLUM CLEARANCE.

During the past year 2,475 dwelling-houses were surveyed, bringing the total number of dwelling-houses surveyed during the first three years of the five years' programme to 8,721. Of these, 7,169 have been the subject of official representation by the Medical Officer of Health. Enquiries have been held by the Ministry of Health in connection with Clearance or Compulsory Purchase Orders for six areas. In five of these the order has been confirmed. The houses in these instances totalled 5,390. The Minister excluded a total of 72 houses from the operations of the Orders, 1·3 per cent. of the houses involved. The decision of the Minister has not yet been received on the last of these areas, viz.: Miles Platting.

Of the eight inspectors employed six were engaged upon these inspections, four of them, however, were interrupted in this work for six weeks whilst they prepared specifications and bills of quantity in respect to property in clearance areas excluded by the Minister of Health conditionally upon certain work being done. The remaining two inspectors attended to the removals and fumigation of furniture and the fumigation of dwelling-houses.

One inquiry by the Ministry of Health was held with regard to the Miles Platting Clearance Area on the 22nd October, presided over by Mr. R. W. Thorp.

The following table presents the position with regard to the representation of areas and the consequent result of such representations :—

TABLE NO. I.
HOUSING ACT, 1930. PARTS I. AND II.
Clearance Areas and Individual Houses Represented to the City Council.

Area	Represented Premises		Exceptions by Minister		Popula- tion	Families to be Re- housed	Date		
	Dwelling- houses	Business Premises	Dwelling- houses	Business Premises			Represen- tation	Enquiry by Ministry of Health	Confirmation of Order
lme	1,076	62	14	20	4,397	1,243	27-7-32	25-7-33	7-11-33
d Bank ..	366	17	1	10	1,701	531	8-9-33	11-9-34	8-11-34
st Gorton	‡390	26	9	14	1,833	444	8-9-33	12-6-34	29-9-34
lyhurst ..	‡1,848	72	34	42	7,897	2,019	8-9-33	30-5-34	29-9-34
coats ..	998	47	{ 14 *44 }	31	4,020	1,065	8-9-33	25-9-34	12-1-35
es Platting	712	47			3,015	772	18-9-34	22-10-35	
ger Street	32	3			145	35	29-3-35		
tery Lane	51	3			197	55	29-3-35		
lyhurst II.	443	53			1,639	481	8-4-35		
llington St.	22				65	22	16-9-35		
Michael's	290	34			1,261	438	15-10-35		
lwick ..	908	42			3,698	1,071	4-12-35		
cheth Brow	18				80	20	12-12-35		
Individual Houses ..	15				39	12			
Total ..	7,169	406			29,987	8,208			

‡ The exceptions by the Minister in West Gorton and Collyhurst are excluded from the Clearance Orders but included in the Compulsory Purchase Orders; the population to re-house is therefore not altered.

* The 44 dwelling-houses shown in the Ancoats Clearance Area are excepted provided certain repairs or alterations are carried out. The figures for rehousing have been adjusted accordingly.

The number of dwelling-houses demolished and the number of persons displaced from these houses at the end of 1935 since the inception of the Housing Act, 1930, as submitted on form H. 256 to the Minister of Health in respect to Clearance Areas and Individual Houses are :—

	Dwelling- houses Demolished	Number of Persons Displaced
Clearance Areas	1,316	5,563
Individual Houses	9	20

The number of dwelling-houses demolished voluntarily by the owners without formal action since the inception of the Housing Act, 1930, is 71, 47 of which were situated within areas to be inspected with a view to action being taken under the Housing Act, 1930.

TABLE NO. 1A.
 PROPERTIES OWNED BY THE CITY COUNCIL.
Inspected with a view to Demolition.

Situation	Dwelling-houses	Business Premises	Population	Demolished
Collyhurst	—	1	—	—
West Gorton	16	5	60	—
Stuart Street, Bradford ..	90	—	367	—
Charlestown Road, Blackley	8	—	18	8
Barrowhill Road, Cheetham	1	—	4	1
Cresswell Street, Harpurhey	12	—	53	—
Total	127	6	502	9

NOTE.—Prior to the passing of the Housing Act, 1935, there existed no legal enactment enabling formal representation of property owned by the local authority to be made by the Medical Officer of Health and, *pari passu*, the payment of government grant to the local authority for the rehousing of persons so dispossessed.

TABLE NO. 2.

Families and Persons displaced from Clearance Areas and Individual Houses, Parts I. and II. of the Housing Act, 1930, up to December 31st, 1935.

REMOVALS.

[illegible]

Disinfestation of Vermin Infested Furniture.

During the year 1,137 van loads of furniture were fumigated with hydro-cyanic acid gas containing the furniture of 1,434 families, 297 of the vans carried two lots of furniture.

The method adopted whereby the furniture of two families can be moved in one van (where there is no objection) has reduced the fumigation costs during the year by approximately £300 and the removal costs by £148 10s., a saving in all of £448 10s.

Disinfestation of Vermin-infested Property in Clearance Areas prior to Demolition.

The Public Health Committee in 1934 authorised the disinfestation of vermin-infested premises in Clearance Areas prior to their demolition to be proceeded with as a routine measure, with the result that 382 houses were fumigated with hydro-cyanic acid gas in 1934 and a further 1,556 in 1935.

The Housing Act, 1935, now gives a local authority power, if it appears necessary, to serve notice in writing on the owner or owners of a building to which a clearance order or demolition order applies that the authority intend to cleanse it from vermin before it is demolished.

OVERCROWDING SURVEY.

In accordance with the requirements of Circular 1507 of the Minister of Health an overcrowding survey of the City has been completed.

The plan adopted for carrying out the survey was based on the utilisation of the register of electors instead of the rate book as recommended in Memorandum B. The advantage of this was that business premises were separated from residences and the names of all people over 21 years of age were already printed under their address. All the streets in the City were alphabetically arranged in polling districts. The printed list of streets in the City provided an index to the forms. This resulted in a considerable initial saving in stationery and printing and enabled the work to be carried out in an expeditious manner. The number of separate Form "A's" required was, by the adoption of this system, reduced from approximately 200,000 to 9,000 cards, printed with the headings required on Form "A" and containing an average of 25 houses on each card. Prior to the commencement of the survey each district sanitary inspector was supplied with the register for his district, for the purpose of ruling out those houses which were obviously not occupied by persons of the working classes.

On the reverse side of the Form "A" was printed Form "C." Provision was made for the carrying forward of the totals of each card and thus the totals for each polling district were obtained and from these the Ward and City totals.

The personnel employed as enumerators were mainly the people who had been employed in compiling the register of electors. 150 men were engaged, who worked under the direction of ten sanitary inspectors at 19 centres in different parts of the City.

The survey reveals a total of 174,010 houses, accommodating 190,361 families, giving an average number of 1.092 families per house. The population covered by the survey amounts to 629,840 individuals, composed of 537,484 adults and 92,356 children under the age of 10 years. The average number of individuals per house is 3.6.

The number of families found to be overcrowded under the standards laid down by the Act is 3,957, or 2.1 per cent. of the total number of families. Of this number 3,920 were overcrowded in relation to the number and floor area of the rooms, while 37 families were overcrowded by the mixing of sexes alone. This sex overcrowding occurred only in one-roomed tenements.

The report as submitted to the City Council is to be found on pages 458 to 469.

The survey commenced on 15th November, 1935, and was completed on 8th February, 1936.

The Human Side of Slum Clearance.

During the year three ladies, quite independently of the department, carried out an investigation with a view to ascertaining the reaction to their new environment of families dispossessed by the procedure of slum clearance and rehoused in City housing estates. This report is of very great value inasmuch as it presents information which is obtained by a non-official agency and is made by persons acting as individuals and as women in personal contact with the housewives of the rehoused families.

(See special report, pages 470 to 487.)

STATEMENT OF SPECIAL INSPECTORS WORK, 1935.

The following statement shows the work done by the two Special Inspectors during the year under review, and comments on certain sections of the work are appended :—

Number of visits *re*—

Public Health (Meat) Regulations	890
Other Food Shops	6
Food Poisoning	54
Import of Chinese Eggs	13
Export of Washed Rags, Hemp, Twine, etc.	90
Vermin—Infested premises	134
Institutions	119
Disinfestations	18
Research Station	119
	— 390
Tips	3
Nuisances	5
Public Health Laboratory	52
Health Exhibitions	16
Water Purification in Swimming Baths.. .. .	95
Shops Act, 1934	112
Aged and Infirm Persons	5
Nursing Homes—Registered	37 ..
Unregistered	6
	— 43
Miscellaneous	87
Statistics	(days) 138
Shops Act, 1934	(days) 82
Samples submitted to Public Health Laboratory :—	
Water from Public Swimming Baths and Pools ..	169
Substances in Food Poisoning Cases	10
	— 179

Export of Washed Rags, etc.

The inspections of waste and second-hand materials for export have increased during the year as shown by the following statement of weights exported. The figures for 1934 are given for comparison :—

	1935	1934
	Tons	Tons
New fents	4	0
Meat cloths	24	22
Washed rags	58	16
Hemp twines and sacking	65	86
Waste paper	280	0
Second-hand clothing	5	1

Vermin Research Work.

Experiments were carried out in the early part of the year with regard to cockroach eradication, but the work had to be suspended to permit the inspectors to concentrate on the work of determining standards under the Shops Act, 1934.

Infestation of a Hospital by Ants.

Complaints having been received of the presence of ants at one of our hospitals the Special Inspectors were instructed to investigate and report on the best practicable method of eradication. The ants were found to be of the species known as monomorium pharaonis, a small red ant about one-sixteenth inch long. They live in the hot parts of a building and feed on sugar, sweets, and meat, as well as on the dead bodies of cockroaches, crickets, steam flies, and similar vermin.

The area covered by the premises being over sixty acres it was decided to concentrate on an isolated building covering about eleven acres. After much patient work their chief haunts were found to be in the brick walls of a calorifier cellar. Baits of poisoned syrup were laid at as many points as possible in the rooms adjoining this cellar and the passages leading to it. The more distant wards and kitchens infested were cleaned down with an ammoniated solution to destroy all the tracks which the ants follow by scent. The walls and ceilings of cellars, passages, and ducts were limewashed.

The infestation being thus circumscribed, the work of eradication was begun. Some eight nests were discovered in the calorifier cellar and these were cut out of the brick walls after spraying the sites with tetrachlorethane. Several of the soft bricks were found to have been tunnelled by the ants with many passages and cavities. The queens, workers, and larvæ were duly killed, and, after the excavations had been daily inspected for about five or six weeks they were bricked up and the walls restored.

The scheme proved so successful that it is being applied to the remainder of the infested hospitals, and supervision is now the work of certain trained inmates who trace all complaints to the source. These men are also continuously engaged in trapping and baiting other insect vermin, and the work is assuming a routine with beneficial results.

Shops Act, 1934.

The Shops Act 1934 imposed new duties on the Local Authority with regard, *inter alia*, to heating, ventilation, sanitary conveniences, lighting, washing facilities, and provision for the taking of meals on the premises in reasonable comfort. In section 10, which deals with the health and comfort of shop-workers in general, the term "suitable and sufficient" is not specifically defined. The difficulty of formulating a comprehensive definition lies in the infinite variety of shops to which the Act applies. The Special Inspectors, therefore, have been engaged in an investigation with a view to suggesting suitable standards, particularly with regard to heating and ventilation. Up to the present the most hopeful results have been obtained by use of the dry kata-thermometer, but more experience of all the varying circumstances is required before definite and final standards can be laid down.

THE RATS AND MICE (DESTRUCTION) ACT, 1919.

The number of premises primarily dealt with each year for the presence of rats or mice has shown a steady decline during the last few years. The figures for the period 1931/1935 are as follows : 1931—2,706, 1932—2,538, 1933—2,321, 1934—2,226, 1935—2,090. These figures are all the more encouraging when it is considered that propaganda, both national and local, over the last 17 years has focussed the attention of the general public on the matter, and they have been advised of the advantages to be gained by consulting the rat officers of the Public Health Department before commencing operations against rats or mice.

Complaints Investigated.

466 complaints of the presence of rats or mice were received in the year, 88 being in connection with premises already under observation. At the remaining 378 an average of 5.93 premises were involved per complaint.

Primary inspections were made at 2,245 premises; of these 1,827 were found to be infested with rats and 263 infested with mice, and at 155 premises no evidence of rats or mice could be found. Of the rat-infested premises 440, or 24.1 per cent., showed infestation of the interior of the building, and 1,387, or 75.9 per cent., infestation of yards, passages, land, and gardens only. The conditions found at each type of premises are shown in Table 1.

Causes of Infestation.

Infestation was found to be directly due to or associated with defective or disused drains or sewers in 64.4 per cent. of the rat-infested premises dealt with; in 57 per cent. of premises affected by interior infestation; and in 66.6 per cent. of premises where infestation was confined to yards, passages, etc. In only 0.54 per cent. of the infested premises was the cause of infestation not determined.

The discovery of the cause of infestation at rat-infested premises is becoming increasingly difficult. The source of drainage infestations are generally more deep-seated than hitherto, probably because the systematic tracing of rat burrows and remedying of defects in drains or sewers nearer to the surface, from which egress was formerly gained, has forced the rats into deeper conduits. In one case it was necessary to excavate to a depth of nine feet in a living-room to locate a disused nine inch drain still connected to the street sewer. The end of the nine inch drain was open and rats had burrowed from it to the surface. The tracing of rat burrows to defects in sewers in public highways has necessitated excavations over ten feet in depth in at least a dozen places and one excavation reached a depth of over fifteen feet.

A number of roof and upper-floor infestations during the year were found to be caused by rats climbing up the inside of drain and sewer ventilating shafts and rainwater pipes connected to untrapped drains. The exceptionally dry summer of 1935 may account for this. The egress of rats from the ventilating shafts was prevented by loosely packing crushed wire netting in the terminal ends, and the rainwater pipe drains were trapped.

It may be of interest to relate how an untrapped rainwater pipe drain was responsible for the infestation of a restaurant in the basement of a warehouse. The untrapped drain was discovered by tracing rats' paw marks from a newly painted fire escape on the outside wall of the six-storeyed warehouse, over the slated roof of an adjoining four-storeyed block of offices, to the head of the offending rainwater pipe. The block of offices was not affected other than that the rats were passing over the roof. Rats from the street sewer were found to be climbing up the inside of the untrapped rainwater pipe, passing over the roof of the office block, and down the fire escape to the restaurant in the basement. After this discovery, a trap was fixed to the rainwater pipe drain and there has been no further rat trouble.

A classification of the causes of infestation will be found in Table II.

Nature of Business carried on at Infested Premises.

Of the 186 business premises affected by interior infestation 50, or 26·8 per cent., were premises in which food was prepared, stored, or sold, and 121, or 65 per cent., were shops, workshops, factories, warehouses, or other places in which the attraction to rats was the scrap food and food paper wrappings thrown about the floors or left unprotected about the premises.

Details of the nature of premises infested will be found in Table III.

Repressive Measures.

The occupiers of rat-infested premises are advised by the visiting officer of the remedial and preventive action which may be necessary. The best methods of carrying out organised rat destruction are suggested, and repeated revisits are made to ensure that the measures are being carried out in an efficient manner. The rat officers have made 3,289 such revisits during the year.

Destruction.

Professional rat-catchers have been employed at 254 premises and have certified to the destruction by them of 7,497 rats in the City area during the year 1935.

The various Corporation departments have co-operated in these repressive measures, and baits totalling 60,708 have been laid (chiefly in sewers by the City Engineer's Department), 45,356 being taken. Corporation departments, by means other than poison, have destroyed 4,392 rats and 1,191 mice during the year.

Rat Proofing.

1,227 premises were rat-proofed during 1935, as follows: 591 by occupiers, 629 by owners, and 7 by rat-catchers. The work carried out includes:—

- (A) The remedying of any defects found in the drainage system.
- (B) The sealing of holes in walls, floors, ceilings, or open pipe tracks.
- (C) The guarding of basement windows, cellar areas, or ventilation openings at or near ground level.
- (D) The protection of short or gnawed door bases with sheet metal or other suitable material.

The condition of the structures of many of the older buildings in the City is such that to make them rat-proof would necessitate reconstruction. In such cases palliative methods only are practicable.

Measures Carried Out.

During the year, 2,332 premises have been cleared of rats and mice.

The position at the end of the year in connection with 3,457 other premises being dealt with for the presence of rats or mice was as follows :—

Repression work in progress by rat-catchers	.. ..	162	premises
„ „ „ „ owners or occupiers		1,175	„
Awaiting reports on condition of drains or sewers	.. ..	266	„
Drain or sewer work done, under observation	.. ..	531	„
Condemned property	.. .. . . . . .	109	„
Other premises where repressive measures have been carried out and are under observation to ascertain whether the work done is sufficient or satisfactory..		1,214	„
Total	.. .. . . .	<u>3,457</u>	premises.

Particulars of the measures carried out during the year are detailed in Table IV.

Recurrence of Infestation.

In the period 1930 to 1934 inclusive, measures for the repression of rats and mice have been carried out in connection with 11,340 premises. At 11,075 premises (97·6 per cent.) there has been no complaint of re-infestation. Re-infestation has, however, occurred in connection with 265 premises in this period, and of these 171 have been dealt with and again reported clear, whilst in the remainder (94) repressive measures are still in hand.

The efficiency of the work done in each year during the period 1930 to 1934 is set out in Table V.

Tracing of Burrows in relation to Drainage Infestation.

In the course of 217 examinations of undermined surfaces made by owners and occupiers, by the City Engineer's Department, and by the Drainage and Sanitary Sections of the Public Health Department, 255 defects were revealed in drains or sewers which in the majority of cases proved to be the cause of the infestation. The number of drainage defects located is lower than for the previous five years, but the percentage of infestation caused by defective drainage remains about the same.

The conditions found and the action taken in connection with this portion of the work are shown in Table VI.

NATIONAL RAT WEEK, 1935.

In compliance with a memorandum from the Ministry of Agriculture and Fisheries, a special effort was made in National Rat Week, 4th to 9th November, 1935.

Rat Week Propaganda.

Suitable announcements were inserted in ten newspapers. Two hundred large posters, informing the public of their obligations under the Act and giving advice as to the best methods of rat repression, were exhibited on hoardings and in public places in the City. A full-page article on methods which may be adopted for the suppression of rats and mice was published in the October issue of "Better Health," 10,000 copies of which are distributed monthly within the City. 1,000 letters were sent to farmers and occupiers of other premises peculiarly liable to infestation by reason of the nature of the business carried on. Two hundred letters were sent to chemists and hardware dealers asking them to make a special show of approved poisons and traps respectively, and all Corporation Departments were invited to co-operate.

WORK DIRECTLY ARISING FROM RAT WEEK PROPAGANDA.

	National Rat Week, 1935	Weekly Average (excluding National Rat Week)
Number of complaints received from 31st October to 11th November	41	8·71
Premises visited in connection with complaints— In Rat Week 110 In week following Rat Week 92	202	41·16
Revisits to other premises known to be infested..	81	60·40

CONDITIONS FOUND AT PREMISES VISITED ON COMPLAINTS DIRECTLY
ARISING OUT OF NATIONAL RAT WEEK.

	Business Premises	Dwelling- houses	Totals
Interior Infestation	20	14	34
Exterior Infestation	22	100	122
Mice only	7	23	30
No evidence	4	12	16
Totals	53	149	202

Advice was given in all cases by letter or verbally by the investigating officer.

Four professional rat-catchers reported having destroyed 583 rodents in the City during National Rat Week.

Repression Work by Corporation Departments during Rat Week.

The City Engineer's, Rivers, Markets, Cleansing, and Parks, etc., Departments carried out special measures which included the laying of 11,508 poison baits in the sewers, and of this number 8,100 (70·38 per cent.) were known to have been taken.

TABLE I.

SUMMARY OF CONDITIONS REPORTED AND NUMBER OF PREMISES
VISITED FOR THE FIRST TIME DURING THE YEAR 1935.

Interior Infestation				Exterior Infestation		No Evidence of Infestation	
Rats		Mice					
Business Premises	Dwelling-houses	Business Premises	Dwelling-houses	Business Premises	Dwelling-houses	Business Premises	Dwelling-houses
186	254	56	207	210	1,177	28	127
703				1,387		155	
Total .. 2,245							

TABLE II.
CLASSIFICATION OF CAUSES OF RAT INFESTATION IN PREMISES PRIMARILY VISITED IN 1935.

Cause of Infestation	Interior Infestation		Exterior Infestation		Totals	Per-centage
	Business Premises	Dwelling-houses	Business Premises	Dwelling-houses		
Directly due to or associated with disused or defective drains or sewers	77	174	115	810	1,176	64·37
Nature of business carried on in premises or vicinity	33	..	39	2	74	4·05
Tips, refuse dumps, market area, etc.	4	1	3	18	26	1·43
Neglect in protection of food scraps and wrappings, poultry kept, etc.	15	10	21	101	147	8·04
Dilapidated premises of defects in structures	25	32	8	8	73	4·00
New premises on housing estates, building operations, demolitions, etc.	17	19	5	121	162	8·87
Vicinity of open or culverted water-courses, railway cuttings, and sidings	15	14	19	111	159	8·70
Cause not determined .. .. .	..	4	..	6	10	0·54
	186	254	210	1,177	1,827	100·00

ANALYSIS OF DRAINAGE INFESTATION.

Infestation	Business Premises		Dwelling-houses		Totals
	Interior	Exterior	Interior	Exterior	
Total number of primary investigations into rat infestation = 100 per cent. ..	186	210	254	1,177	1,827
Directly due to defective or disused drains or sewers	62	92	92	714	960
Associated with defective or disused drains or sewers	15	23	82	96	216
Total number of premises affected by drainage infestation	77	115	174	810	1,176
Percentage of drainage infestation in each group	41·39	54·76	68·50	68·81	64·37

TABLE III.
NATURE OF PREMISES INFESTED DURING THE YEAR 1935.

Particulars of Premises	Interior		Confined to Yards, Passages, Gardens, or Adjoining Lands	Totals
	Rats	Mice	Rats	
Restaurants, public houses, cafes, etc. ..	9	1	7	17
<i>Premises where food is prepared, stored, or sold.</i> —Butchers, grocers, dairies, confectioners, corn stores, sweets, etc. ..	41	10	58	109
<i>Other premises attractive to rats.</i> — Stables, marine stores, sheds, etc.	13	1	5	19
<i>Land.</i> —Farms, tips, allotments, etc.	2	..	10	12
<i>New buildings.</i> —Building estates, etc. ..	5	..	3	8
<i>Factories and Workshops.</i> —Joiners, garages, tailors, cabinet makers, clothing, pattern card makers, printers, bookbinders, etc... ..	39	3	27	69
<i>Warehouses.</i> —Cotton, cloth, electrical apparatus, phosphates, etc.	14	5	4	23
<i>Shops.</i> —Newsagents, drapers, jewellery, florists, cycles, hosiery, radio, wines, hairdressers, etc.	35	26	51	112
<i>Institutions.</i> —Women's hostel, hospital, commercial school, etc.	2	2	4	8
<i>Public hall.</i> —Cinema	1	..	..	1
<i>Offices.</i>	10	7	31	48
<i>Unoccupied premises.</i> —Shops, offices, etc... ..	15	1	10	26
<i>Dwelling-houses</i>	254	207	1,177	1,638
Totals	440	263	1,387	2,090

TABLE IV.
DESTRUCTION AND PREVENTION MEASURES CARRIED OUT DURING
THE YEAR 1935.

Measures carried out	By whom carried out	Business Premises	Dwelling- houses	Totals
Prevention only	Occupier	17	161	178
Destruction only	Occupier	71	81	152
	Owner	2	7	9
	Rat-catcher	2	..	2
Destruction, Proofing, and Prevention	Occupier	226	337	563
	Owner	2	20	22
	Rat-catcher	4	3	7
	Destruction by occupier, proofing by owner	54	59	113
	Destruction by rat-catcher, proofing by occupier	23	5	28
	Destruction by rat-catcher, proofing by owner	37	18	55
	Destruction by occupier, sewers by City Engineer's Department	107	657	764
	Destruction by occupier, drains by owner	78	361	439
	Totals	623	1,709	2,332

TABLE V.

PERCENTAGE EFFICIENCY AT THE END OF THE YEAR 1935 OF THE WORK
DONE IN EACH YEAR DURING THE PERIOD 1930 TO 1934.

Particulars	Year				
	1930	1931	1932	1933	1934
Number of premises reported clear of rats and mice	2,481	2,055	2,210	2,151	2,443
Number of premises at which re-infestation has occurred	89	80	56	39	1
Re-infested premises subsequently dealt with, again reported clear of rats and mice ..	60	59	38	14	..
Re-infested premises at which repressive measures are still in hand	29	21	18	25	1
Premises dealt with at which there is no further complaint of the presence of rats or mice..	2,452	2,034	2,192	2,126	2,442
Percentage of efficiency of the work done at the end of the year 1935	98.83	98.97	99.18	98.83	99.95

TABLE VI.

TRACING OF RAT BURROWS IN RELATION TO DRAINAGE INFESTATION.

Number of examinations made by	<i>City Engineer</i> 109	<i>Owners and Occupiers</i> 97	<i>Drainage Section</i> 8	<i>Sanitary Section</i> 3	TOTALS 217
<i>Conditions found or action taken.</i>					
Defective sewers requiring reconstruction..	3	..	..	..	3
Sewers reconstructed	3	..	..	..	3
Minor defects in sewers repaired	62	..	7	..	69
Disused privy midden drains removed ..	31	..	..	..	31
Other disused drains removed or otherwise dealt with	31	29	2	..	62
Defective outlet drains repaired by Cor- poration on owners' orders	13	5	..	..	18
Defective drains remedied by owners or referred to Sanitary Section	5	37	..	26	68
Street drain inlets repaired	4	..	..	..	4
Upward rat burrows consolidated	9	4	..	..	13
Surface rat burrows consolidated	5	41	2	..	48
Undermining due to other causes than rats	6	..	..	..	6
Totals	172	116	11	26	325

OTHER DRAINAGE EXAMINATIONS BY SANITARY SECTION MADE DURING THE
YEAR AT THE INSTANCE OF THE RAT SECTION.

Premises examined in consequence of suspected drainage infestation	57
Premises awaiting examination of drains in consequence of suspected drainage infestation	2
Premises at which drainage work required under notice has been completed during the year (includes work outstanding at the end of 1934)	27
Premises at which drainage work required under notice was in progress at end of the year	37
Notices to repair defective drains served or in course of preparation	2

REPORT ON THE WORK OF THE CLEANSING
DEPARTMENT SUPPLIED BY THE DIRECTOR OF
PUBLIC CLEANSING.

DUTIES OF THE CLEANSING AUTHORITY.

The cleansing of the City is under the control of the Cleansing Committee, which is responsible for the efficient management and transaction of all matters relating to the scavenging of the City and the performance of acts and duties in connection with every branch of City cleansing as directed by the various Acts of Parliament and Local Acts now in force. In addition, the Cleansing Committee undertakes, on behalf of the Markets Committee, the cleansing of the various public markets within the City.

For administrative purposes the Department is divided into two sections:—

1. House and Trade Refuse Section—to deal with the collection, removal, and disposal of household and other refuse arising from premises in the City and the cleansing of markets.
2. Street Cleansing Section—for the scavenging of the City, watering and gritting of roadways, clearance of snowfalls, etc.

Both these sections are co-ordinated in matters of supervision, intermobility of transport and man power, disposal facilities, use of repair and maintenance centres, and in other similar ways.

EXTENT OF THE CLEANSING DEPARTMENT'S OPERATIONS.

The volume of work necessitated to carry out the Committee's obligations is indicated in the following table, showing the collection of refuse during the year ending 31st March, 1936 :—

[illegible]

From the above will be gained some impression of the variety of refuse and the magnitude of the Department's operations. To illustrate this still more, there are within the City 216,000 ashbins, each of which is required to be emptied at least once per week, so that this one operation alone involved no less than 11,232,000 individual house calls per annum. Similarly, the operations connected with street cleansing necessitated the sweeping of 907,490,000 square yards of surface, and the distribution of 2,835,050 gallons of water and 1,653 tons of sand and chippings on the roads, whilst over 880 tons of refuse had to be treated and disposed of every working day throughout the year.

The cost of the cleansing service throughout the year was £326,477 18s. 2d. This is equivalent to a cost of—

s. d.

1 1·03 per £1 in the rates,

or 8 8·74 per person per annum,

or 2·01 per person per week.

Staff, Plant, Depots, etc.

The Committee employs, under the Director of Cleansing, a staff of about 67 officials and 1,466 workmen, and for the purpose of its work requires some 103 motor sweepers, refuse collection vehicles, tipping wagons, etc., 185 horses, a steam tug and fleet of 11 barges, about 70 heavy railway wagons, 4 small locomotives, and 251 light railway trucks. It utilises also 28 depots and 4 railway sidings and is the landlord of four estates with a total area of 3,639 acres.

The Collection of Refuse from Streets and Premises.

The collection of refuse from the City streets and premises is a matter of careful and precise organisation. Both the streets to be swept and the premises to be visited are completely scheduled and receive attention at specified times on specified days each week. The interval between cleansings is never more than seven days, and in many cases in the centre of the City clearances are made several times during a week or even daily.

Refuse Disposal.

It will be appreciated that, from an administrative standpoint, it is the effective disposal of the great mass of refuse which so quickly accumulates in a large City rather than the collection which constitutes the more difficult problem. As previously stated, there is more than 264,000 tons of refuse for disposal per annum, or over 880 tons each working day, and, obviously, the sooner this waste matter, often deleterious in character, is completely disposed of in as hygienic a manner as possible the better for general health, comfort, and well-being.

Methods of Refuse Disposal.

To an inland town there are generally four main methods of refuse disposal available, viz. :—

Disposal inside depot :—

1. Incineration.
2. Separation and Incineration.

Disposal outside depot :—

3. Land reclamation and sale to farmers.
4. Controlled tipping.

Taking the four above-mentioned methods *seriatim*, they may be briefly described as follows : —

Incineration.

The refuse is delivered into the depot and after a very elementary separation of metals, brickbats, etc., is burnt in forced-draught furnaces or boilers.

Separation and Incineration.

This method treats the refuse, as received, by machinery designed to separate the refuse into various parts—firstly, to divide it into burnable and unburnable elements, and secondly, to extract such components as dust, cinders, metals, etc., with a view to further utilisation. As an inside depot method of disposal the separation method is more economical and has a number of other advantages over the older straight incineration method.

Land Reclamation.

Excellent examples of pure land reclamation are given by the Manchester Corporation's estates at Carrington and Chat Moss, which, originally raw moss, have been converted into flourishing agricultural communities producing a rental of more than £7,000 a year. Land reclamation such as this, however, is generally only commenced when an outlet is required for refuse having a manurial value, like the contents of the pail closets which are practically extinct to-day in Manchester.

Controlled Tipping.

This form of refuse disposal must not be confused with the ancient discredited open dumping. It is a modern, scientific, and hygienic method, consisting of depositing the refuse in layers of a specified depth and sealing each layer with earth or other suitable material at the end of the day, meanwhile taking certain precautions to prevent flies and vermin.

When properly carried out it gives an economic and highly efficient means of disposing of the refuse, and, as may be seen at various places within the Manchester boundary, this method is of great value in reclaiming otherwise waste lands (such as old quarries, land subject to flooding, etc.), which are easily converted into playing fields or pleasure grounds after the tipping and sealing have been completed.

During the past two years extensive experiments and tests have been carried out by the technical staff of the Cleansing Department to determine whether controlled tipping is a safe and hygienic method of refuse disposal. The results of these tests, which have been incorporated in a book published by the Cleansing Committee, have proved conclusively that the faith of the advocates of this method has been amply vindicated.

The Future of Manchester Cleansing.

The Cleansing Committee is alive to the need for keeping up to date and has adopted a policy based on the slogan "Efficiency with Economy." In pursuance of this policy the Committee is gradually mechanising its transport; has installed three separation plants of the most modern type; looked after the welfare of its workmen by installing baths, wash-bowls, dining rooms, etc., at the depots; and, by using otherwise excessive space at certain depots to form flower beds and grass plots, has completely changed these depots from the old, drab, town's yards into places with some pretensions to beauty.

That the policy is a sound one is evidenced by the fact that the estimates for the current financial year, whilst providing for a standard of work equal to or better than any in the past, show a saving in cost over the average expenditure for the five years 1927 to 1931 of no less than £74,000 per annum.

The progressive programme of reorganisation and reconstruction throughout the Department, upon which, as indicated, a commencement has been made, will keep Manchester, it is believed, in the forefront of the world's cleansing authorities.

SPECIAL REPORTS.

REPORT OF THE MANCHESTER COMMITTEE ON CANCER

For Year ended 31st October, 1935.

MEMBERS OF THE MANCHESTER COMMITTEE.

President THE RT. HON. THE LORD MAYOR OF THE
CITY OF MANCHESTER.

Chairman DR. R. VEITCH CLARK, Medical Officer of
Health.

Hon. Treasurer Alderman SIR NOTON BARCLAY, c/o District
Bank Ltd., Spring Gardens, Manchester, 2.

Hon. Auditor VERNON WALKER, Esq., F.C.A.

Mr. E. K. AGNEW Manchester and Salford Hospital for
Skin Diseases.

Mr. W. ARMITAGE, J.P. Holt Radium Institute.

Prof. S. L. BAKER Professor of Pathology, Manchester
University.

*Dr. E. M. BROCKBANK, M.B.E. Chairman, Manchester Group Execu-
(Chairman—Research Sub-Com.) tive, British Empire Cancer
Campaign.

*Mr. G. A. CARVER Ancoats Hospital.

*Dr. CATHERINE CHISHOLM Northern Hospital for Women and
Children.

Dr. H. R. CLARKE Manchester Victoria Memorial Jewish
Hospital.

*†Mr. H. O. CLAYTON Associate Inst. Petroleum Technologists.

Mr. WALTER COBBETT, C.B.E... .. Manchester Royal Infirmary.

Dr. J. M. DAVIDSON H.M. Medical Inspector of Factories.

†Mr. W. DAVIES, C.B.E., J.P. Chairman, Manchester Insurance
Committee.

†Dr. D. DOUGAL, M.C. St. Mary's Hospital for Women and
Children.

Dr. A. E. DUNSTAN Institution of Petroleum Technologists.

Councillor R. G. EDWARDS Chairman, Public Health Committee.

Dr. G. W. FITZGERALD, O.B.E. Northern Hospital for Women and
Children.

Dr. M. GAMBLE, M.B.E. Withington Hospital and Institution.

Dr. F. H. GARNER Institution of Petroleum Technologists.

†Mr. H. W. GARNETT Formerly Trustee Pilkington Cancer
Research Fund.

Alderman R. S. HARPER	.. . . .	Public Health Committee.
*Mr. W. H. HEY, F.R.C.S.	.. ..	Christie Cancer Hospital.
Sir EDWARD HOLT, Bart.	.. ..	Manchester Royal Infirmary.
Mr. E. E. HUGHES, F.R.C.S.	.. ..	Ancoats Hospital.
*Alderman W. T. JACKSON, M.A., J.P.	.. ..	Public Health Committee.
Mr. J. KEWLEY	.. ..	Institution of Petroleum Technologists.
Mr. R. G. LAWSON	.. ..	Christie Cancer Hospital.
*†Dr. E. BOSDIN LEECH, F.R.C.P.	.. ..	Manchester Royal Infirmary.
Dr. R. G. MCGOWAN	.. ..	Secretary, Manchester Branch B.M.A.
‡Professor H. B. MAITLAND	.. ..	Professor of Bacteriology, Manchester University.
*Dr. R. W. MARSDEN, F.R.C.P.	.. ..
†Dr. W. St. C. McCLURE	.. ..	Deputy M.O.H., Manchester.
*Mr. F. P. NATHAN, O.B.E., M.A.	.. ..	Christie Cancer Hospital.
(Chairman, Executive Sub-Com.)		
Sir CHRISTOPHER T. NEEDHAM	.. ..	Chairman of the Council, Manchester University.
Dr. RALSTON PATERSON	.. . . .	Director, Holt Radium Institute, Manchester.
Mrs. D. QUAS-COHEN	.. ..	Manchester Victoria Memorial Jewish Hospital.
‡Professor H. S. RAPER, F.R.S.	.. ..	Dean, Faculty of Medicine, Manchester University.
*Mr. L. L. SAMUELS, F.C.A.	.. ..	Manchester Group Executive, British Empire Cancer Campaign.
Dr. L. SAVATARD	.. ..	Manchester and Salford Hospital for Skin Diseases.
*Dr. W. FLETCHER SHAW	.. ..	St. Mary's Hospital for Women and Children.
†Mr. A. H. SOUTHAM, F.R.C.S.	.. ..	Manchester Royal Infirmary.
*Professor J. S. B. STOPFORD, F.R.S.	.. ..	Vice-Chancellor, Manchester University.
†Mr. T. STOTT, J.P.	.. ..	Christie Cancer Hospital.
†Dr. A. CORSAR STURROCK	.. ..	Northern Hospital for Women and Children.
Professor E. D. TELFORD, F.R.C.S.	.. ..	Manchester Royal Infirmary.

* Members of Executive Committee.

† Co-opted members not specifically appointed to represent body which is shown opposite their names.

‡ Co-opted members of Research Sub-Committee.

CONSULTATIVE COMMITTEE ON CANCER RESEARCH.

Representing the Manchester Committee on Cancer.

*Dr. E. M. BROCKBANK, F.R.C.P. (Chairman, Scientific Research Sub-Committee).

*Dr. R. VEITCH CLARK.

*Mr. WILSON H. HEY, F.R.C.S.

Sir EDWARD HOLT, Bart.—Nominated by the Radium Institute.

Mr. F. P. NATHAN, O.B.E.—Nominated by the Christie Hospital.

*Dr. RALSTON PATERSON.

Representing the University.

*The Vice-Chancellor—Professor J. S. B. STOPFORD, M.D., F.R.S.

*Professor S. L. BAKER, M.R.C.S., L.R.C.P., D.P.H.

*Professor I. M. HEILBRON, D.SC., F.R.S.

*Professor H. B. MAITLAND, M.D., M.SC.

*Professor H. S. RAPER, M.D., D.SC., F.R.S.

Sir CHRISTOPHER NEEDHAM.

* Members of Scientific Research Sub-Committee.

Co-opted Members of Scientific Research Sub-Committee—

Professor BRAGG, SC.D., F.R.S.

Dr. J. M. DAVIDSON.

SCIENTIFIC STAFF.

C. C. TWORT, M.D. Pathologist, (Director, Cancer Research Laboratory).

A. C. BOTTOMLEY, PH.D. Chemist.

J. M. TWORT, B.SC. Zoologist.

R. LYTH, M.SC., DP. BACT. (Manchester) Bacteriologist Assistant.

J. VINE, M.B., CH.B. Pilkington Research Scholar.

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REPORT OF THE MANCHESTER COMMITTEE.

The five years' financial agreement with the University for the conduct of the research work expired at the end of March, 1935. Arrangements were made for the work to be continued on the same level for a further twelve months.

The future of the work is now being discussed, and although important results are being obtained and new lines of investigation are opening up continually, the extent of our activities will depend largely upon the resources of the committee, which is mainly responsible for the financial upkeep of this work.

Funds.

During the past year the sum of approximately £4,000 was received by the committee. A list of subscribers and donors is included in this report, and the committee wishes to thank all those who have assisted in this way.

A special gift of £25 for the purchase of scientific apparatus was received by the Chairman of the Research Committee.

Unless further resources become available, it will be impossible for the committee to take full advantage of the results already obtained.

Special Grant.

The grant made to Mr. H. M. Parker, M.Sc., Research Physicist at the Holt Radium Institute, in connection with his researches upon the basis of radium values, was continued until March, 1935, when the Christie Hospital and Holt Radium Institute undertook the financial responsibility for this work.

REPORT BY DR. C. C. TWORT
(Director of Cancer Research Laboratories).

A New Test for Assessing the Carcinogenic and Dermatitic Properties of Mineral Oils.

Since the publication of our last report we have devised a new test for assessing the toxicity of mineral oils, it promising to have an all-round superiority over any test so far utilised. Having previously found a simple method whereby the approximate carcinogenicity of a mineral oil could be rapidly ascertained, viz., by the examination of the refractivity, we set about to find out by what means the animal reacted to oils, and it was during these investigations that certain observations brought to light this fresh test. It has the merit that not only can one judge as to the probable carcinogenicity of an oil, but also as to its probable powers of causing dermatitis. The test is performed by injecting a few drops of oils into an animal and subsequently recovering the oil for examination as to its physical characteristics. The basic principle of the test is that if the oil is toxic the animal will alter the physical characteristics while the non-toxic oil will remain unaltered.

At present we are primarily concerning ourselves only with the change in the refractive index. What happens is that an animal reacts against the toxic oil in such a manner that there is a fall in the refractive index roughly proportional to the carcinogenicity plus the dermaticity of the oil in question.

Up to the present we have made about 2,000 tests, and from these we have been able to collect some very interesting data. The general indications we have so far obtained may be briefly summarised as follows :—

- (1) The fall in the refractive index is proportional to the degree of unsaturation or de-hydrogenation of the oil.
- (2) There is no change in the refractive index of such oils as medicinal liquid paraffin, squalene (a highly unsaturated pure hydrocarbon oil obtained from the liver of the dog-fish), cylinder stocks, etc., all of which cause no reaction, or practically no reaction, on the skin of the animal when placed in contact with it.
- (3) The refractive index fall varies inversely as the viscosity of the original oil.
- (4) The viscosity of an oil was increased, probably due to contamination with unsaponifiable animal matter.
- (5) The density of a few oils so far examined was lowered relatively less than the refractive index ; consequently the refractivity was lowered.
- (6) Carcinogenicity and viscosity of two oils being equal, the refractive index fall is greater in a heavy gravity oil than in a lighter gravity one.
- (7) There is a definite correlation between the refractive index fall and carcinogenic potency, viscosity, and refractivity.

In connection with the animal itself our findings are to be expected, thus—
 (1) the longer the survival time of the animal the greater the refractive index fall ; (2) the greater the body weight of the animal (w) the greater the refractive index fall ; (3) the smaller is (w) the greater is the refractive index fall per gramme (w) ; (4) the greater the quantity of oil injected (Q) the less the refractive index fall. The standard quantity of oil injected is 0.5 cc. for a 20 g. animal, but if an animal of this weight is not available the dose must be varied according to the square of the cube root of the weight of the animal, so that our constant is $\frac{0.5 \text{ cc.}}{7.37}$

An analysis of the results with the first hundred ordinary commercial products injected gave us the following correlation co-efficients, obtained by the simple ranking method, perfect correlation giving unity.

Carcinogenic potency and refractive index fall	..	..	..	..	0.616
„ „ „ refractivity constant	..	..	..	..	0.535
Refractive index fall and „ „	..	..	..	..	0.472

so that with these particular oils it appeared that the refractive index fall after injection gave a better indication of their carcinogenicity than did the examination of the refractivity constants. We have mentioned already that

viscosity plays a very important part, and as no allowance was made for this it is evident that our figures were adversely affected. When we examined the correlation co-efficients of the same hundred oils as regards viscosity we found :—

Refractive index fall and viscosity	..	..	..	..	..	—0·531
Carcinogenic potency and viscosity	..	..	..	..	..	—0·190
Refractivity constant and viscosity	..	..	..	..	..	—0·104

Thus it can be understood that an oil of very low viscosity might give a marked refractive index fall although quite incapable of inducing tumour formation on the skin, and, on the other hand, an oil of a high viscosity which would give a low refractive index fall might have quite a considerable degree of carcinogenic activity. We have been easily able to demonstrate that viscosity *per se* plays little or no part, one of the simplest methods being to take an active oil and, on dividing it into two portions, adding to each an inert oil which on one hand raises and on the other hand lowers the viscosity of the original oil. The resulting blends act similarly, both when placed in contact with the skin or injected internally into animals. Again we have found that all commercial oils of a Redwood No. 1 viscosity up to about 2,000 at 70° F. give a definite fall in the R.I. when injected into animals. But if we ourselves make up an artificial blend from a cylinder stock and a white oil (both of which are inert on the animal) so as to imitate an active commercial product, we find that the animal fails to change the refractive index when our artificial blend is injected. A variety of experiments of this nature shows that the animal reacts exactly according to the task allotted to it.

The quantity of oil injected into a mouse is of necessity small, and the amount which one is able to recover is not usually more than about one-fifth of that injected. Consequently, in order to be in a position to make a viscosity measurement, we had to utilise some hundred animals for injection with a single sample of oil. One oil only has so far been tested in this manner, and here the kinematic viscosities of the original and the recovered oils were 34·8 and 38·9 respectively, indicating a substantial rise in the viscosity following the injection. This is a significant observation tending to support the hypothesis of a chemical change having taken place, for if polymerisation alone were responsible for the rise in viscosity one would not have expected to find such a profound change in the refractive index and density. Although several processes may be involved in changing the character of the oil, it appears that the essential process most likely at work is one of hydrogenation. If this is so, it is no more than one would expect in view of the observations we made in the early days of our investigations of oils, viz., that hydrogenation or oxidation of oils and tars substantially reduced or eliminated their carcinogenicity, and that dehydrogenation tended to increase their carcinogenicity. There is one possible fallacy which we have not so far been able to exclude. It may be that there are in the recovered oil soluble substances from the animal body which have escaped saponification during the purification process, and if these substances happened to be solid, as is very probable, it would not require much of them appreciably to affect the viscosity of the recovered mineral oil.

The manner of action of the animal is at present a question upon which we have very little information for our guidance. This of course is of no consequence from the practical point of view of the diagnosis of the toxicity of mineral oils, but it is of very great importance for our understanding of the mechanism of cancer. The four most likely possibilities appear to be :— chemical change, permeation of cell membrane, local trapping by the endothelial tissue and removal to other parts of the body. The indications are strongly in favour of the first playing the chief role. There is a striking analogy in the manner in which the animal attacks the oil and that by which we can attack it in the laboratory by using solvent extraction or sulphuric acid. Some of the physical properties of an oil recovered from an animal about one week after injection may be very similar to those of another sample of the same oil which has been treated with about 20% sulphuric acid, but a possible significant difference is that of the viscosity. In spite of our knowledge of the capabilities of the animal organism to accomplish relatively difficult *in vitro* tasks, our results were considerably more definite than we had expected ; indeed altogether the facts established seemed, to say the least, rather remarkable.

Another important indication which emerges from our experiments is, as would be expected, that the animal attacks small molecules easier than large ones, so that the difference in carcinogenicity and dermaticity of an oil probably really depends upon the difference in the violence of the reaction of the animal. Thus, on a very sensitive animal an oil might produce a violent reaction resulting in dermatitis, while on a very resistant animal the reaction would be slower with the possibility of subsequent cancer formation. In this connection there is another observation which needs examination. We have observed that with oils of similar carcinogenicity and similar viscosity there is a tendency for those with the higher gravity to give the greater refractive index fall.

We had observed in earlier work that given two oils of similar physical characteristics, with the exception of the gravity, that the higher gravity sample tended to be more carcinogenic than the lower gravity sample. If our injection test records dermaticity of an oil we now know that the higher gravity oil tends to be more dermatitic than a lower gravity one otherwise apparently similar. Further, in view of the fact that the dermatitic constituents act antagonistically to the carcinogenic constituents we are bound to visualise a greater amount of the latter as present than our skin test actually demonstrates. Incidentally the dermatitic constituents of an oil injure the general health of the animal so that both locally and generally the carcinogenic constituents are at a disadvantage in the higher gravity sample as compared with those in an otherwise similar low gravity sample.

The injection test is being used by us in many different lines of investigation. For example, elaborate experiments were carried out to see whether there was any difference in the reaction of animals which had previously shown a difference

in skin reaction. For this purpose several hundred animals which were very sensitive, and on the other hand very resistant, to skin contact with mineral oils were compared as to their sensitivity to the injected oils. Up to the present we have not been able to observe any definite difference. Another line involves the testing of animals bearing cancers, but here the experiments have not advanced very far.

The general advantages of the injection test of oils over that of the skin test are very evident : it is quicker, lasting over 7—10 days instead of a year ; it necessitates the use of but one or two animals instead of one to two hundred animals, and consequently in all respects it is a much more economical test ; and lastly it has the merit, when considered in conjunction with certain of the physical characteristics of the oils, of not only differentiating cancerous from relatively non-cancerous oils, but also of differentiating dermatitic from non-dermatitic. In other words, by utilising a single animal we are in a position to judge as to whether a particular sample of oil is or is not likely to be instrumental in causing skin troubles to workmen exposed to contact with it, in no matter what kind of occupation the said workman may happen to be engaged.

The Varying Sensitivity of Different Sites of the Skin to Mineral Oils and Tars.

Among what may be called the side issues related to the question of mule spinners' cancer is that concerned with the variation in sensitivity among different individuals and of different parts of the skin of the same individual. During the last few years we have interested ourselves in this question, and by conducting a varied series of experiments we have obtained the following indications as regards our animals. These indications may not be strictly applicable to man, although in the main there is, in our opinion, no reason to postulate a difference in the response to carcinogenic agents of man and our animals. We have been able to show most clearly that the skin of the interscapular region is more sensitive than that covering the sacral, pectoral, or abdominal region, while the soles of the feet appear to be highly resistant. This response of the feet was, of course, anticipated, and bears out the observation of practice that mule spinners, while they may be walking about all day on an oily floor with bare feet, do not suffer from cancer of the skin in this region.

We have also established the fact that animals which are sensitive in one area are usually relatively sensitive in another area. But although the skin as a whole of one animal is inherently sensitive as compared with that of a second animal, we could find no evidence that simple warts or papillomas arising in one area influenced the induction of tumours of any type elsewhere. There was some evidence that when the papilloma became malignant there

was retardation of development of malignancy elsewhere. The probable explanation of this result was that while a simple papilloma has no detrimental influence on the general health of the animal organism, the same cannot be said of cancer, and in view of the fact that the latter type of tumour tends to divert vitamins, etc., from the remainder of the body for its own profit it is not surprising that a second tumour elsewhere should be slow to develop. This is in accordance with the observations in the field of experimental and clinical cancer, it being one of the primary factors underlying the development of malignant tumours that the cells of the organism which are undergoing the malignant change should receive an adequate food supply. In other words, cancer is loathe to supervene on an unhealthy tissue.

Experiments on Atmospheric Pollution by Hydrocarbons.

Another line of investigation in which we are interested at present is that relating to atmospheric pollution by crude hydrocarbons, such as those emitted from the exhaust of motor vehicles and from domestic and factory chimneys. We have already performed some tentative experiments in this connection from the results of which we have indications pointing in certain directions, although it will require a much more elaborate investigation before such indications can in any way be considered as established facts. The exposure of animals to the fumes of mineral oils cracked on an electrically-heated plate showed that such animals appear to differ in some respects from their neighbours not so exposed. Two groups of animals were exposed to fumes, Group 1 receiving applications of gas tar to the skin, Group 2 remaining untouched. Groups 3 and 4 were corresponding lots of animals kept in the well-ventilated animal house. It was found that skin tumours in Group 1 arose definitely earlier than those in Group 3, the fumes apparently sensitising the animal to the gas tar. The spontaneous lung tumours which occurred in our animals were somewhat more prevalent in Groups 1 and 3 than in Groups 2 and 4, gas tar here possibly sensitising the lung. On the other hand we could find no evidence that the oil fumes sensitised the lung to the tumours, although the fumes apparently increased the prevalence of catarrhal changes.

Another line of research in connection with this subject was the investigation of the oily, tarry material recovered from the soot emitted from the exhaust of high compression internal combustion engines. The soot we investigated contained about 3% of this liquid material, and, as might be anticipated, when placed in contact with the skin of our animals it did not fail to show itself to be carcinogenic. The activity of this oily material was high; about that to be expected in view of the activity found by previous experiments on mineral oils cracked at different temperatures. It appears that at a certain critical temperature mineral oils, regardless of their actual carcinogenicity, can be brought by cracking at this temperature to a more or less constant carcinogenic activity.

Dr. Lasnitzki has brought to a conclusion his researches on the potassium of tumour tissues in relation to the cations of the surrounding medium.

The general results of these investigations, which were carried out on the Jensen rat sarcoma, are that the potassium present in tumour cells is almost always found to be freely diffusable, but this diffusion outwards into the neighbouring medium is hindered by the presence of calcium. This is so in a potassium free medium, but the difference is still clearer if the potassium content of the medium is approximately equivalent to that of the potassium content of blood plasma. Here, in a calcium free solution, the normal amount of potassium in the tumour tissue is diminished by about 70%, but in the presence of calcium by less than half of this amount. These findings show that (at least under *in vitro* conditions) the intracellular potassium and that present in the medium are not in equilibrium with one another. We only have apparent equilibrium because the presence of calcium interferes with outward diffusion of the potassium. Calcium may act by lessening the cell permeability for cations and one concludes that the energy metabolism of the tumour cells, which is dependent upon the potassium and calcium content of the medium, is, in reality, only dependent upon the potassium, the influence of the calcium being indirect. These results are ready for publication.

Dr. Lasnitzki is also engaged on researches on the potassium needs of the animal organism. The starting point of these researches was to answer the question whether a deficiency of potassium in food stuffs was able to prevent the development and growth of tumours. Tests on normal mice showed that the animals which were fed with food rendered poor in potassium by extraction, but containing the necessary vitamins, rapidly lost weight and died, and that the addition of potassium equivalent to that originally present in the food only prolonged life for a short while. Further researches on the nature of the extracted factor necessary for life are now being carried out.

Dr. Vine's investigation on the culture of mouse tissues in artificial media have now reached a stage when the effect of the incorporation of carcinogenic agents, etc., in the medium can be tested. The first substance being utilised in this connection is a colloidal solution of 1, 2, 5, 6, Dibenzabthracene.

ADDENDUM TO REPORT, 1932-34.

As regards the provisional recommendations concerning mule spindle oils referred to on page 14 of our report for 1932-34, we have been informed by representatives of the Institution of Petroleum Technologists that it would be

more convenient for the oil industry were our recommendations expressed in a somewhat different manner, our refractivity figures of 0.5539 and 0.5569 of course remaining unaltered. The amended specification suggested is:—

“Mule spindle mineral lubricating oils should have a specific refractivity below 0.5539 when the specific gravity is above 0.895, or a specific refractivity below 0.5569 when the specific gravity is below 0.895. By specific gravity is meant the specific gravity at 60° F. in relation to water at 60° F. vacuo/vacuo.

“By specific refractivity is meant $\frac{n-1}{d}$ where n is the refractive index

for d line sodium light, and where d is density in grammes per millilitre at 20° C. The specific gravity shall be determined by the method laid down in standard methods for testing petroleum and its products, published by the Institution of Petroleum Technologists.

“The density shall be determined by means of a pycnometer or bottle having a minimum capacity of 10 millilitres or by a density hydrometer. If the latter is employed it shall conform to the British Standards Specification No. 1A or No. 2A. The thermometer employed must be accurate to within $\pm 0.1^\circ$ C.

“The refractive index is to be determined by any recognised form of refractometer provided that it is capable of giving results to an accuracy of ± 0.0005 . This instrument should be calibrated and periodically checked with liquids of known refractive index, such as carbon tetrachloride or benzene.

“Special care must be taken that the temperature of the sample is in equilibrium, and that of the bath temperature controlled to $\pm 0.5^\circ$ C.”

PUBLICATIONS OF THE MANCHESTER COMMITTEE ON CANCER.

Post-Graduate Lectures on various aspects of the Cancer Problem and Special Report on results of operation in cases of Cancer of the Breast	Published June, 1928.
“Untersuchungen über Krebserzeugende Agentien” (Zeit. für Krebs., May, 1928.)	C. C. TWORT, M.D., and H. R. ING, PH.D.
“Mule Spinners’ Cancer and Mineral Oils” (Lancet, 14th April, 1928)	C. C. TWORT, M.D., and H. R. ING, PH.D.
Incidence of Intrathoracic Tumours in Manchester (Lancet, July 16th, 1927) . .	J. B. DUGUID, M.D.

- Variations in the Incidence of Intrathoracic Cancers as ascertained from autopsy records (Report of the International Conference on Cancer, London, 1928)..
- Professor J. SHAW DUNN and C. POWELL WHITE, M.D.
- Reaction of Skin to Mineral Oils (Journal of Hygiene, December, 1928)
- C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- Experiments on Nature of Carcinogenic Agents in Mineral Oils (Journal of Pathology and Bacteriology, vol. xxxii., 1929)
- C. C. TWORT, M.D., and J. D. FULTON, PH.D.
- Some factors influencing the development of Experimental Oil and Tar Tumours in Mice (Lancet, 25th May, 1929) ..
- C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- Further Experiments on the Carcinogenicity of Synthetic Tars and their Fractions (Journal of Path. and Bact., vol. xxxiii., 1930)
- C. C. TWORT, M.D., and J. D. FULTON, PH.D.
- Relative Potency of Oils and Tars (Journal of Hygiene, February, 1930)
- C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- Classification of 4,000 Experimental Oil and Tar Skin Tumours of Mice (Lancet, June, 1930)
- C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- Studien über Krebsentstehung — Krebsbildungsfähigkeit (Zeit. für Krebs., November, 1930)
- C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- Carcinogenic Potency of Mineral Oils (Journal of Industrial Hygiene, vol. xiii., No. 6, June, 1931)
- C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- Changes in the Liver of Mice following the injection of Hydrocarbon Oils (Lancet, February, 1932)
- C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- Disease in relation to Carcinogenic Agents among 60,000 Experimental Mice (Jour. of Path. and Bact., vol. xxxv., 1932) ..
- C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- Studien über die Konzentration des aktiven carcinomerregenden Prinzips in Ölen und Teeren (Zeit. für Krebs., 1932) ..
- C. C. TWORT, M.D., and J. D. FULTON, PH.D.
- Cancer Susceptibility in relation to Colour in Mice (Journal of Hygiene, vol. xxii., No. 4, 2nd November, 1932)
- C. C. TWORT, M.D., and J. M. TWORT, B.SC.

- Sarcoma and Carcinoma of Guinea-pig (Jour. of Path. and Bact., vol. xxxv., 1932) .. C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- The Etiology of Breast Cancer (Lancet, October 8th, 1932) C. C. TWORT, M.D., and A. C. BOTTOMLEY, PH.D.
- Suggested Methods for the Standardisation of the Carcinogenic Activity of Different Agents for the Skin of Mice (American Journal of Cancer, vol. xvii., No. 2, February, 1933) C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- Relation of Carcinogenicity of Mineral Oils to certain Physical and Chemical Characteristics of these oils (Journal of Industrial Hygiene, vol. xv., No. 4, July, 1933) R. LYTH, M.SC.
- Fatty Infiltration of Liver of Mice resulting from the Ingestion of Medicinal Liquid Paraffin, etc. (Journal of Hygiene, vol. xxxiii., No. 3, 4th August, 1933) .. C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- The Selection of Non-carcinogenic from Carcinogenic Oils (Journal of Hygiene, vol. xxxiii., No. 4, 30th November, 1933) C. C. TWORT, M.D., and R. LYTH, M.SC.
- The Carcinogenicity of Chrysene and Oleic Acid (American Journal of Cancer, vol. xxi., No. 4, August, 1934) A. C. BOTTOMLEY, PH.D., and C. C. TWORT, M.D.
- The Prevention of Mineral Oil and Tar Dermatitis and Cancer (Lancet, February 10th, 1934) C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- The Utility of Lanolin as a Protective Measure against Mineral Oil and Tar Dermatitis and Cancer (Journal of Hygiene, vol. xxxv., No. 1, 4th March, 1935) C. C. TWORT, M.D., and J. M. TWORT, B.SC.
- Tests for assessing Carcinogenicity of Mineral Oils ("La Ciencias" — Buenos Aires, 1935) C. C. TWORT, M.D.
- The Violence of Reaction of the Animal to the Etiology of Cancer and Inflammation (Journal of Hygiene, vol. xxxv., No. 3, 30th August, 1935) C. C. TWORT, M.D., and R. LYTH, M.SC.
- Studies on the Internal Organs of Mice painted with Carcinogenic Agents (American Journal of Cancer, vol. xxiii., No. 1, January, 1935) J. M. TWORT, B.SC., and C. C. TWORT, M.D.

A New Method for Measuring Carcinogenicity (Journal of Hygiene, vol. xxxv., No. 1, March 4th, 1935)

C. C. TWORT, M.D., and
R. LYTH, M.Sc.

PUBLISHED WITH THE AID OF A GRANT FROM THE
MANCHESTER COMMITTEE ON CANCER.

An Inquiry into the Basic Cause and Nature of Cervical Cancer (Surgery Gynaecology and Obstetrics)

K. V. BAILEY, M.C., M.D., CH.B.,
M.R.C.P.

The Role of the Pituitary in the Etiology of Cancer (British Medical Journal, 31-10-31)

WILLIAM SUSMANN, B.A., M.D.

The Occupational Incidence of Primary Lung Cancer (Quarterly Journal of Medicine, January, 1932)

W. BROCKBANK, M.A., M.D.
B.Ch., M.R.C.S., M.R.C.P.

Aetiology of Cancer of the Skin with special reference to occupation (British Medical Journal, June 29th, 1935, Vol. I., p. 1308)

ALEX. R. SOMERFORD, M.D.

MANCHESTER AND DISTRICT REGIONAL SMOKE ABATEMENT COMMITTEE.

REPORT ON THE WORK OF THE COMMITTEE DURING THE YEAR 1935.

It will be recalled that the formation of a Joint Smoke Abatement Board for South-East Lancashire has been considered by the Committee to be desirable for some time past and much time and thought have been given to the proposal. A fresh series of observations were taken, and a statement was prepared which gave reasons for the formation of a statutory body in order that more effective action may be taken in controlling smoke emission in the regional area, and especially that manufacturers should have the benefit of the helpful technical advice which can be given by specially qualified inspectors in connection with their boiler plant. Experience has shown in many cases that such advice has resulted not only in reducing smoke emission but in the saving of fuel costs. This statement was approved by the Committee as a basis of a scheme for forming a Joint Board, and the Executive Committee later considered what would be the best means of giving effect to the wishes of the Committee to bring forward the proposal. It was first decided to ask certain of the larger local authorities to co-operate with the Committee in arranging local conferences to stimulate interest in the scheme, but owing to some rather serious difficulties which presented themselves an alteration in the method of procedure was suggested by the Chairman and Honorary Secretary and approved by the Executive Committee, whereby visits to individual local authorities would be made by the Chairman and Honorary Secretary. Some of these visits have already been made, and as a result it is hoped that some considerable support to the scheme will be assured when the proposal is again brought forward. (A copy of the statement regarding the Committee's proposals for a Joint Board is given on pages 449 to 457.)

An elementary course of Fuel Economy and Smoke Abatement was again held during the 1934-35 Session at the Manchester Municipal College of Technology. These classes, which were specially arranged with the object of educating boiler firemen in regard to the more efficient working of boiler plants, have been very successful and a source of much satisfaction to the Committee. Thirty students enrolled for the course, twenty-two of whom sat for the examination, and of these twenty satisfied the examiners. Certificates awarded by the Regional Committee to the successful candidates were presented by the Lord Mayor of Manchester (Alderman Samuel Woollam, J.P.) at the Town Hall on the 24th September, 1935.

An elementary course of a similar character was also held at Warrington under the auspices of the Health Committee. Fourteen students attended these classes, nine of whom sat for the examination at the close of the session. Seven satisfied the examiners appointed by the Regional Committee and will receive certificates awarded by the Committee.

The Ministry of Health have now decided that there should be some co-operation between His Majesty's Alkali Department and local authorities in matters relating to smoke nuisances. Mr. H. G. Howson, H.M. Inspector of Alkali, etc., Works interviewed the Honorary Secretary in connection with this matter, when it was pointed out that the Ministry were desirous that in smoke abatement work the areas of local authorities should have the advantage of the co-operation of the Alkali Inspectors who, by the nature of their work, have an entry in the industrial field from quite a different angle to that possessed by the local authorities. This different relationship, based as it is upon a knowledge of industrial processes, it is thought might facilitate the work of smoke abatement. With this object in view Mr. Howson has been co-opted as a member of the Executive Committee.

The Coal Utilisation Council approached the Honorary Secretary of the Committee through Mr. Pirie, their Chief Engineer, and Mr. Kirkman, Area Combustion Engineer for the North-Western Branch, and suggested that some measure of co-operation between the Council and the Regional Committee might be mutually useful. This Council is financed by colliery owners, coal merchants, and factors. Its objects are to encourage the use of home produced fuels, and one of their interests is to advise as to the prevention of smoke. Mr. Kirkman offered to visit any works, etc., in the district and advise as to the steps to be taken to minimize smoke emission, without any charge. The Executive Committee after an interview with Mr. Kirkman decided to accept the offer and notify affiliated local authorities accordingly.

The number of authorities represented on the Committee at the end of the year was 56 as against 58 the previous year, Bolton and Glossop having discontinued membership.

R. VEITCH CLARK,
Honorary Secretary.

MANCHESTER AND DISTRICT REGIONAL SMOKE ABATEMENT
COMMITTEE.

Proposal to form a South-East Lancashire Joint Smoke Abatement Board.

It will be recalled that in September, 1931, a scheme for the establishment of a South-East Lancashire Joint Smoke Abatement Board was approved by the Regional Committee and had been sent out to all the local authorities in the area for submission to the respective Councils, but owing to the critical financial conditions in the country at that time it was considered advisable to postpone consideration of the proposal.

The matter has been reconsidered by the Committee in the light of improved business in the country generally, and in view of the very strong opinion held by the members of the necessity for the formation of a Joint Board, in order to make greater headway in smoke abatement, it has been decided to submit the scheme detailed in the later pages of this pamphlet.

The Regional Committee was formed at the instance of the Ministry of Health in 1924. Representatives of 103 local authorities, constituting the Manchester and District Town Planning Area, were invited to attend a meeting convened for the purpose of considering the best method of bringing about uniformity of practice in the administration of the smoke nuisance clauses and the prevention of atmospheric pollution. Eventually recommendations were made for uniform time limit concession, definition of black smoke, and methods of inspection, and were adopted by the Committee.

It was realised, however, that the need for constant attention in smoke nuisance inspection could not be met in many of the districts, and a scheme for the formation of a Joint Statutory Authority to deal with the smoke question in the whole of the area was proposed but was not approved.

The Regional Committee therefore continued to work as an advisory body and much good work has since been done in this capacity, but it has become increasingly evident from the experience during the intervening years that more definite and effective control of smoke emission over the whole of the regional area is an absolute necessity if satisfactory progress is to be made. The reasons for this are not far to seek. It is well known that smoke is not confined to its area of origin but can and does drift for many miles in sufficient concentration to produce injurious effects. Districts where there is no smoke produced are affected by smoke from other districts, and it is in their own interest to support the efforts to prevent smoke emission from outside their own area.

Whilst one authority may employ expert smoke inspectors, who advise manufacturers with regard to the more efficient working of their boiler plant and in other methods of reducing smoke emission, inhabitants of that district may be affected by serious smoke nuisance from adjoining districts. The Committee is much more anxious to help manufacturers than to prosecute them. It is not desired that they should spend a lot of money on new plant and fittings but to operate their boiler plant efficiently, thereby reducing smoke emission and the cost of steam raising. Manufacturers have proved this as will be seen from the examples quoted later in this statement (page 454).

Many district authorities are not in a position which will enable them to undertake either the cost or the work of effective administration of the smoke clauses. The proposal which is now put forward is, in the opinion of the Regional Committee, the only effective and at the same time economical method of administering the smoke clauses so that the smoke nuisance in South-East Lancashire can be controlled with reasonable efficiency and without imposing an undue burden upon any of the incorporated authorities.

The Committee desires to emphasise two points in this respect—

- (a) that a petition from residents in one of the largest local authorities was sent to the Ministry of Health appealing for the Regional Committee to be converted into a Statutory Authority, and
- (b) the facts as revealed in the following two tables :—

TABLE I.
Comparison of Manchester's Smoke and that of Thirty-three Neighbouring Districts.

District	Year	Number of Half-Hourly Observations	Number of Working Days Necessary to obtain these Observations	Average Smoke per Half-hourly Observation in Minutes		
				Dense Black	Moderate	None
Manchester	1929/30 ..	723	1,300	1·8	13·5	14·7
	1933/34 ..	455	1,178	2·3	15·7	12·0
	Average ..	589	1,239	2·0	14·4	13·6
33 other local authorities within the Regional Area	1929/30 ..	542	42	9·2	13·2	7·6
	1934	455	34	7·8	16·1	6·1
	Average ..	499	38	8·6	14·5	6·9

TABLE II.
Showing in Percentages the Half-hourly Periods in which Dense Black Smoke Emissions occurred and the Duration of each Emission.

District	Year	Percentage showing less than 2 minutes emission	Percentage showing 2 to 5 minutes emission	Percentage showing 5 to 10 minutes emission	Percentage showing 10 to 20 minutes emission	Percentage showing emissions of 20 minutes and upwards
Manchester	1929/30 ..	71·3	15·8	11·1	1·5	0·3
	1933/34 ..	68·3	20·7	8·6	2·0	0·4
	Average ..	70·2	17·7	10·1	1·7	0·3
33 other local authorities within the Regional Area	1929/30 ..	3·7	20·3	38·3	32·5	5·2
	1934	6·4	26·4	38·6	24·2	4·4
	Average ..	4·9	23·1	38·5	28·7	4·8

The Committee particularly desires to draw attention to these tables, in which it will be seen that the results of observations taken in the two periods have been averaged.

The great disparity between the Manchester figures and those of the other districts is, in the opinion of the Committee, a very forcible argument in favour of the formation of a Statutory Authority.

It should be noted that to obtain the 589 *observations in Manchester* when dense black smoke was recorded 1,239 *working days were required*, whereas in the outer districts the 499 *observations were obtained in 38 working days*.

This means that relatively (taking the average for the two periods) *the emission of dense black smoke in these areas was over 25 times as frequent in occurrence as in Manchester*.

This is not meant as a criticism of any local authority's work, but is given simply as a record showing the improvement that results from constant observation and control of smoke emission.

Again, of the 589 observations taken in Manchester 70·2 per cent. gave less than two minutes emission of dense black smoke in the half-hour, but the corresponding figure for the 499 observations in the other areas was 4·9 per cent.

The figures in the remaining four columns in Table II. again show most strikingly that not only is the emission of smoke more frequent in the other areas but that the emissions are for prolonged periods, and the nuisance created is therefore of a much greater intensity.

It is obvious that such a voluminous smoke emission affects the whole of the South-East Lancashire area to its great detriment, all the districts being seriously affected.

These facts in themselves justify the Committee in presenting its recommendation that the Regional Committee be replaced by a Statutory Authority, so that the whole area may be dealt with as a single unit.

This proposed action is, in the opinion of the Committee, a vital necessity to the well-being of the population of all these districts.

The Regional Committee desires to make it clear that the figures in this report are true samples of the conditions which exist in a district in the South-East Lancashire industrial area, and are not in any way selected to give an exaggerated impression.

SMOKE AND HEALTH.

Smoke is produced by the imperfect combustion of bituminous coal.

Its principal constituents are soot (or carbon), tarry matters, and sulphur acids. These are inimical to health in two ways :—

- (1) By the formation of the familiar grey smoke pall—characteristic of the sky of industrial areas and (in the extreme forms) by the production of fogs of varying density up to dense black fog. In both cases—whether in the form of grey cloud or of fog—the smoke shuts out the sunlight from the district and in this way seriously impairs the health of the people and encourages the onset of diseases in many forms. That the occurrence of these over industrial areas is mainly due to smoke and not natural causes has been abundantly proved. Thus continuous daily observations during five recent years have shown that Timperley, situate eight miles to the south-west of Manchester, received 82 per cent. more light than Manchester. It is to be noted that the climatic conditions are indentical in the two places. The only difference is the occurrence of the smoke pall over the city. During fogs the acid in the air markedly increases. The occurrence of fog is always followed by a marked rise in deaths from disease of the lungs.
- (2) By the deposit of soot and tarry matters and acids on the delicate lining membranes of the nose, throat, air passages, and lungs, thus producing catarrhs and many forms of respiratory disease.

Respiratory Diseases.

We breathe thirty-five pounds by weight of this polluted air daily. At normal temperature and pressure this is equal to 432 cubic feet. The carbon or soot is deposited in and blackens the lungs.

The more dangerous tarry matters and sulphur acids set up irritation in the lining membranes right from the nose to the lungs. This reduces the natural power of resistance of the breathing passages and the lungs to all kinds of infections especially the catarrhs and pneumonias. The percentage of deaths due to these respiratory diseases in England and Wales during the year 1933 was 11·3 ; in Manchester it was 15·2.

In addition, it is recognised that the chronic respiratory conditions so set up are largely responsible for much of the heart disease so prevalent in the country.

Cancer.

Recent investigations indicate that there is an appreciably greater incidence of cancer of the organs of the chest in places where the atmosphere is most polluted.

Rickets.

This disease of the bones is produced both by lack of sunshine and by errors in diet. The lack of sunshine in this respect is notably bad in its results in the crowded areas of industrial districts.

So characteristic has rickets been of the industrial areas of this country that it is known on the Continent as the "English Disease."

Great bony deformities may result in stunting growth and, in women, constituting a grave danger in childbirth.

Rickets also greatly reduces virility and personal capacity for work and activity.

It can be cured by exposure to sunlight—either natural or artificial.

Tuberculosis.

Deprivation of sunlight is a potent factor in the development of tuberculosis in the individual.

Sunlight is one of the most effective agents at our disposal for the cure of tuberculosis.

Many other diseases are definitely favoured by or attributable to lack of sunshine.

The obverse of this picture, viz. : that sunlight is essential to the maintenance of health and efficiency, needs no elaboration.

It may be noted, however, that the Industrial Fatigue Research Board has shown that the output of work is definitely reduced when lighting conditions are bad.

ECONOMIC DISADVANTAGES OF SMOKE.

The housewife can best testify to the effects of this mixture of soot and grit rendered corrosive by sulphurous acid and adhesive by tar.

Wash days are multiplied, domestic labour is increased, laundry bills become larger, and the lives of the various fabrics necessary for the decoration of the home and the uses of the individual are shortened.

Even buildings and stonework of all kinds suffer from the smoke nuisance.

Their surfaces are blackened. They have to be cleaned frequently.

Paint work has to be renewed more often. The delicate ornamentation slowly disappears. Ultimately the surface of the stones is slowly corroded away. It has been estimated that His Majesty's Office of Works would save £120,000 per annum upon the upkeep of official buildings alone if the town atmosphere were as clear as that of a rural area.

Smoke is solely a product caused by the partial and wasteful combustion of raw coal. Coal is the nation's most valuable asset. It is essential that it should be used to give the greatest possible return. The amount of black smoke emitted is an indication of the appalling waste taking place.

With proper methods of carbonisation, well-designed plant, efficient stoking, and the scientific use of the various instruments devised to aid the "live" manufacturer this should not take place.

Again of equal importance is the control of domestic smoke and an ever present realisation of the need for a reduction in the consumption of raw coal in dwelling-houses.

PRACTICAL EXAMPLES OF SMOKE ABATEMENT AND FUEL ECONOMY.

The following are particulars of concrete cases specially investigated by smoke inspectors in the Manchester Corporation Public Health Department in which there has been a definite saving of fuel costs and reduction of smoke emissions by the adoption of more scientific methods in the boiler houses, overhauling and repair of plant, boiler settings, flues, employment of more capable firemen, etc.

All the cases quoted are those where frequent emissions of black smoke from the chimneys of the works had been reported on many occasions over a period of years:—

Description of Works	Number of Boilers	Amount of Saving
No. 1—Cotton Mill	4 Lancashire Boilers (3 usually in service)	Coal consumption reduced from 75 tons to 60 tons per week.
No. 2—Brickworks	1 Lancashire Boiler	15 per cent. reduction in coal consumption.
No. 3—Small manufacturing works	1 Cornish Boiler	Coal consumption reduced from 3 tons per week to 2 tons per week.
No. 4—Small Tannery	1 Cornish Boiler	Coal consumption reduced by from 15 cwt. to 1 ton per week.
No. 5—Bleachers, Dyers, and Finishers	Originally 1 Lancashire Boiler and 1 Galloway Boiler. Now replaced by 2 new Lancashire Boilers of greater capacity	Coal consumption reduced by approximately 148 tons per annum.
No. 6—Bleachers and Finishers	1 Lancashire Boiler	Approximately £28 per annum.
No. 7—Chemical Works	Originally 4 Lancashire Boilers. Now 6 Lancashire Boilers	Cost of coal reduced by approximately £10 per week.
No. 8—Bleachers, Dyers, and Finishers	Originally 6 Lancashire Boilers. Replaced by 2 and now 3 new Lancashire Boilers of greater capacity	Coal consumption reduced by 39·33 per cent. over a period of 2 years whilst two boilers were in operation, better results have been obtained since the addition of the third boiler.
No. 9—Rubber Works	10 Lancashire Boilers	Statistics over a period of 5 years showed a reduction in steam raising costs of approximately 7/- per ton of coal used.

NOTE.—In all these cases the figures quoted are fully authenticated by the firms concerned after careful investigation. Observations by the smoke inspectors have shown that there has been a definite reduction of smoke emission in every case.

The scientific and rational use of coal will contribute materially to the solution of the smoke problem.

GENERAL POINTS.

The Public Health Act, 1875, imposed upon local sanitary authorities the duty of abating nuisances due to smoke. This is primarily effected by observations taken by sanitary inspectors. Since 1875 the duties of inspectors have increased enormously, and it is a practical impossibility to obtain effective observations of smoke emissions by an official whose time is fully occupied by the numerous and urgent duties which are now required of a sanitary inspector,

For the efficient control of smoke emission the services of whole-time smoke inspectors are necessary. Such provisions can be made in the larger units, but the majority of the districts in the South-East Lancashire area are too small to provide individually sufficient work to occupy a smoke inspector full time. Joint action is therefore essential to attain this object.

The Ministry of Health Departmental Committee on Smoke and Noxious Vapours Abatement recognised this in the paragraph of their final report, published in 1921, where they recommended that the Minister of Health should be empowered to constitute joint authorities for the control of smoke nuisances.

RECOMMENDATIONS.

The Regional Committee, therefore, urgently and strongly recommend that a Joint Smoke Abatement Board for South-East Lancashire be established.

The Joint Board, if constituted, would primarily carry out its duties in the first instance by the sub-dividing of the area into a number of inspectorial districts, on the basis of the number of industrial chimneys in the whole area and their geographical situation. It is suggested that fifteen such inspectorial districts should be constituted, each district supplying enough work for the full time occupation of an inspector.

The scheme put forward on the last occasion provided for twenty districts but this has been modified for the following reasons :—

- (1) Provision was then made for inspection of all chimneys in the area irrespective of whether they were functioning or not. It has been found that some 20 per cent. of these are not in use to-day.
- (2) Reorganisation and the provision of other forms of motive power in factories.
- (3) Improved transport facilities in the area permitting each inspector to cover a larger area.

It is the confident opinion of the Committee that the beneficial results of the operations of the Joint Board would be such as to convince the authorities and manufacturers of its effectiveness and economic value.

In due course the Board's activities could be extended if considered desirable.

It is unnecessary to detail the powers and duties of the Board, inasmuch as these are set out in the formal scheme and also as the staffing and other provisions would be dealt with by the new Board.

The Executive Committee has estimated the annual expenditure of the new Board and is satisfied that on a maximum basis this expenditure would be met by a levy of not more than *one-ninth-of-a-penny rate* from each authority.

The attached statement on the maximum charge which would fall on each authority has been prepared by the Hon. Treasurer to the Regional Committee.

In the event of all the authorities not agreeing to join the Board the approximate cost would be revised according to the actual number of constituent authorities.

MANCHESTER AND DISTRICT REGIONAL SMOKE ABATEMENT COMMITTEE.

Proposed South-East Lancashire Joint Smoke Abatement Board.

Statement showing the Rateable Value as at 1st April, 1935 ; the estimated produce of a penny rate for 1935-36 ; and the contributions which would be recoverable, equal to one-ninth of the estimated produce of a penny rate, from each of the undermentioned 94 authorities :—

Authority	Rateable Value 1st April, 1935	Estimated Produce of a Penny Rate 1935-36	Estimated Contribution
COUNTY BOROUGH—	£	£	£
Bury	359,687	1,415	157
Bolton	1,052,033	3,985	442
Manchester	6,694,312	24,685	2,742
Oldham	700,591	2,648	294
Rochdale	548,630	2,071	230
Salford	1,133,117	4,300	477
Stockport	740,960	2,996	332
Warrington	371,396	1,467	163
	11,600,726	43,567	4,837
MUNICIPAL BOROUGH—			
Ashton-under-Lyne	231,601	893	99
Bacup	83,808	320	35
Chorley	137,359	531	59
Darwen	186,137	697	77
Dukinfield	69,086	270	30
Eccles	248,704	975	108
Glossop	90,021	337	37
Hyde	144,555	567	63
Haslingden	83,538	327	36
Heywood	124,190	464	51
Leigh	212,486	840	93
Macclesfield	153,596	639	71
Middleton	133,976	525	58
Mossley	43,372	167	18
Rawtenstall	147,385	577	64
Stalybridge	107,678	389	43
Stretford	509,709	2,055	228
Swinton and Pendlebury	199,295	780	86
Todmorden	111,057	429	47
	3,017,553	11,782	1,303
URBAN DISTRICTS—			
Abram	20,179	79	8
Adlington	30,113	117	13
Alderley Edge	14,930	55	6
Altrincham	164,157	650	72
Ashton-in-Makerfield	68,291	249	27
Audenshaw	58,427	239	26
Atherton	90,172	347	38
Billinge and Winstanley	16,988	67	7
Blackrod	10,948	44	4
Bollington	—	90	10
Bowdon	36,187	135	15
Bredbury and Romiley	70,774	270	30
Chadderton	140,434	540	60
Cheadle and Gatley	174,785	675	75
Compstall	5,106	18	2
Crompton	66,965	260	28
Denton	92,135	355	39
Droylsden	70,064	290	32
Failsworth	72,803	271	30
Farnworth	127,574	510	56
Golborne	52,004	200	22
Hale	17,373	432	48
Handforth	7,656	28	3
Carried forward	1,408,065	5,920	651

Authority	Rateable Value 1st April, 1935	Estimated Produce of a Penny Rate 1935/36	Estimated Contribution
Brought forward	£ 1,408,065	£ 5,920	£ 651
URBAN DISTRICTS—continued.			
Hazel Grove and Bramhall (Estimate)	110,063	414	46
Hindley	65,862	249	27
Hollingworth	11,254	42	4
Horwich	71,075	270	30
Ince-in-Makerfield	60,706	229	25
Irlam	71,166	276	30
Kearsley	62,238	250	27
Knutsford	37,947	147	16
Lees	17,642	64	7
Littleborough	61,522	240	26
Little Lever	18,443	71	7
Lymm	32,106	122	13
Marple (Estimate)	47,868	180	20
Marsden (Estimate)	32,120	119	13
Milnrow	46,414	182	20
New Mills	41,927	160	17
Newton-in-Makerfield	89,356	348	38
Prestwich	196,473	775	86
Radcliffe	162,490	645	71
Ramsbottom	74,763	287	31
Royton	77,190	318	35
Saddleworth	76,297	300	33
Sale	241,285	935	103
Springhead	18,253	67	7
Tottington (Estimate)	24,860	92	10
Turton	70,734	285	31
Tyldesley	70,396	280	31
Urmston	273,850	1,075	119
Wardle	20,580	80	8
Westhoughton	62,841	236	26
Whitefield	64,036	260	28
Whitworth	33,325	124	13
Wilmslow	89,044	355	39
Worsley	115,702	444	49
Yeardsley-cum-Whaley (Estimate)	9,692	36	4
	3,967,585	15,878	1,741
RURAL DISTRICTS—			
Bucklow (Estimate)	147,202	551	61
Chapel-en-le-Frith	237,138	897	99
Chorley (Estimate)	110,463	414	46
Disley	22,089	85	9
Limehurst	27,920	105	11
Macclesfield (Estimate)	96,104	360	40
Runcorn (Estimate)	178,337	668	74
Tintwistle	27,906	101	11
Warrington	76,776	303	33
	923,935	3,484	384
SUMMARY.			
Country Boroughs	11,600,726	43,567	4,837
Municipal Boroughs	3,017,553	11,782	1,303
Urban Districts	3,967,585	15,878	1,741
Rural Districts	923,935	3,484	384
Total	£19,509,799	£74,711	£8,265

JOHN E. BRAY,
Hon. Treasurer to the Committee.

City Treasurer's Office,
Town Hall, Manchester,
25th June, 1935.

Report of the Public Health Committee upon the
Survey of Overcrowding in Manchester under and
in accordance with the Provisions of Section 1 of
the Housing Act, 1935.

The Public Health Committee presents the following report:—

1. The Council will no doubt recollect that the Housing Act, 1935, contains provisions in relation to the ascertainment and abatement of overcrowding in working-class houses.

2. Section 1 of the Housing Act, 1935, places upon every local authority the following duties and obligations, viz.:—

- (a) the carrying out of an inspection or survey of the working-class houses within their district to ascertain what dwelling-houses are overcrowded;
- (b) to prepare and submit to the Minister of Health a report showing the result of such inspection and the number of new houses required in order to abate the overcrowding; and
- (c) unless the local authority are otherwise satisfied that the required number of new houses will be otherwise provided, to prepare and submit to the Minister of Health proposals for the provision thereof by the local authority.

3. The survey of the working-class houses in Manchester for the purpose stated has been carried out under the direction of the Medical Officer of Health, and has now been completed, and the Medical Officer of Health has submitted to your Committee a report showing the result of the inspection and the number of houses in the City which in accordance with the standards laid down in the Act are overcrowded, and also indicating the number of new houses required in order to abate the overcrowding which is found to exist.

4. The Medical Officer of Health's report is contained in the Appendix hereto, and your Committee recommends the Council to approve of the report and to transmit it to the Minister of Health in accordance with the provisions of the Act.

5. With the completion of the survey it will now be necessary to formulate proposals for the provision of new houses by the Corporation which are necessary to abate the overcrowding in the City, so far as the requirements are not likely to be otherwise satisfied, and the Minister of Health has directed that such proposals shall be submitted to him by the 1st August, 1936, or within such longer period as the Minister may in any special circumstances agree. The Housing Committee will, therefore, now give consideration to this matter in the light of the Medical Officer of Health's report.

6. In presenting this report your Committee desires to place upon record their high appreciation of the manner in which the survey has been carried out.

On behalf of the Public Health Committee,

S. MEADOWCROFT,
Chairman.

Town Hall, Manchester,
14th April, 1936.

APPENDIX

SURVEY OF OVERCROWDING MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOUSING ACT, 1935, SECTION I.

The Medical Officer of Health begs to submit the following report on the position revealed by the recent Overcrowding Survey in accordance with Circular 1507, which requires that a report on the result of the inspection and the number of houses required in order to abate overcrowding should be forwarded to the Minister of Health by June 1st, 1936. Instructions relative to the procedure to be adopted in making the survey and reporting thereon are contained in Memorandum "B" issued by the Ministry and entitled "The Prevention and Abatement of Overcrowding."

METHOD OF SURVEY.

A comprehensive and detailed examination of all working-class accommodation in the district, including the measurement of all habitable rooms in every house, although it will ultimately be necessary, was not required for this first survey, as it was required that the inspection, once started, should be completed in the shortest possible time in order to get an accurate picture of the position. The longer the time taken to complete the survey the greater the liability of the results being invalidated by movements of the population and other factors. The scheme outlined by the Ministry in Memorandum "B" has been carried out. It divided the survey into two parts:—

Survey "A."—This consisted of a preliminary house to house canvass to ascertain how many houses were empty and, if occupied, how many were overcrowded under Table I. It was also required that Survey "A" should show the number of houses not overcrowded under Table I., but which might possibly become overcrowded when Table II. was applied.

Survey "B."—This consisted of the measurement of all the habitable rooms in the empty, overcrowded, and possibly overcrowded houses discovered in Survey "A." To these, Table II. was applied to give the final figure of overcrowding.

STANDARD OF OVERCROWDING.

The standard of overcrowding used in the survey is that given in Section 2 and the First Schedule of the Housing Act, 1935. Section 2 specifies that—

(1) A house shall be deemed to be overcrowded at any time when the number of persons sleeping in the house either—

- (a) is such that any two of those persons, being persons ten years old or more of opposite sexes and not being persons living together as husband and wife, must sleep in the same room; or
- (b) is, in relation to the number and floor area of the rooms of which the house consists, in excess of the permitted number of persons as defined in the First Schedule to this Act.

(2) In determining for the purposes of this section the number of persons sleeping in a house, no account shall be taken of a child under one year old, and a child who has attained one year and is under ten years old shall be reckoned as one-half of a unit.

The First Schedule states :—“ For the purposes of Part I. of this Act the expression ‘ the permitted number of persons ’ means, in relation to any dwelling-house, either—

- (a) the number specified in the second column of Table I. in the annexe hereto in relation to a house consisting of the number of rooms of which that house consists, or
- (b) the aggregate for all the rooms in the house obtained by reckoning, for each room therein of the floor area specified in the first column of Table II. in the annexe hereto, the number specified in the second column of that table in relation to that area,

whichever is the less :

Provided that, in computing for the purposes of the said Table I. the number of rooms in a house, no regard shall be had to any room having a floor area of less than 50 square feet.

ANNEXE.

TABLE I.

Where a house consists of—

(a)	One room	2	persons
(b)	Two rooms	3	..
(c)	Three rooms	5	..
(d)	Four rooms	7½	..
(e)	Five rooms or more	10,	with an additional two in respect of each room in excess of five.

TABLE II.

Where the floor area of a room is—

(a)	110 square feet or more	2	persons
(b)	90 square feet or more, but less than 110 square feet	1½	..
(c)	70 square feet or more, but less than 90 square feet	1	..
(d)	50 square feet or more, but less than 70 square feet	½	..
(e)	Under 50 square feet	Nil	”

Further, Section 12 of the Act states that the word “ room ” does not include any room of a type not normally used in the locality either as a living room or as a bedroom, also that “ dwelling-house ” means any premises used as a separate dwelling by members of the working-classes or of a type suitable for such use.

Thus bathrooms, sculleries, etc., are not counted as part of the accommodation, and each part of a house which is sublet constitutes, as far as overcrowding is concerned, a separate house.

The standard of overcrowding is therefore a combination of three standards, viz. :—

- (1) a sex separation standard ;
- (2) a standard according to the number of rooms in a house ; and
- (3) a standard according to the size of the rooms.

This is the first Act of Parliament in which a national standard of overcrowding has been formulated and in moving the second reading of the Bill on January 30th, 1935, Sir Hilton Young said: "In the campaign the first essential was a standard of what was overcrowding and the laying down of a national standard of accommodation. A national standard of accommodation has now been reached in agreement and in consultation with the housing authorities and with Medical Officers of Health all over the country. Its two foundations were decency—the separation of the sexes over 10 years of age—and space—enough accommodation for each person. The standard was reached by saying that there should be so many persons per room, and to correct that by reference to rooms below a certain size. The standard need not be regarded as the ultimate ideal, but one upon which it was possible to get reform under way."

RESULTS OF THE SURVEY.

The Ministry of Health has drawn up Form "C," on which the results of the survey are to be presented. It has also been specified that separate forms should be used for (a) all the working-class houses in the area and (b) those houses in the area belonging to the Local Authority. Tables "A" and "B," which give these two returns as required by Form "C," have therefore been prepared on this basis.

It will be seen that the forms are intersected by a diagonal line. The figures to the left of this line show the overcrowded families and to the right the families which are not overcrowded. The number of persons in each family is recorded, and the total number of families overcrowded and not overcrowded for each size of family is shown to the right of the table. The total number of families, overcrowded and not overcrowded, is indicated at the foot of the table under the "permitted numbers" of the houses they occupy, as also are the empty houses and those which will be vacated by the removal of overcrowded families.

The survey reveals a total of 174,010 houses, accommodating 190,361 families, giving an average number of 1.092 families per house. The population covered by the survey amounts to 629,840 individuals, composed of 537,484 adults and 92,356 children under the age of 10 years. The average number of individuals per house is 3.6.

Under the overcrowding provisions of the Act the population is changed from individuals to the equivalent number of "persons," a "person" being an individual over 10 years of age or two children under that age. On this basis the equivalent number of "persons" in the survey is 583,662, which gives an average number of 3.3 "persons" per house and 3.1 "persons" per family.

Similar information relating to each ward in the City is given in the "Ward Table."

The number of *families* found to be overcrowded under the standards laid down by the Act is 3,957, or 2.1 per cent. of the total number of families. Of this number 3,920 were overcrowded in relation to the number and floor area of the rooms, while 37 families were overcrowded by the mixing of sexes alone. This sex overcrowding occurred only in one-roomed tenements.

TABLE I.

An analysis of the number and size of overcrowded families is given in Table I., which also indicates whether they were found to reside in Corporation or in privately-owned houses.

TABLES II. AND III.

Table II. sets forth the extent of the accommodation to be vacated by decrowding operations, the size of each house being indicated by the permitted number of occupants which it will accommodate. A similar table (Table III.) has been prepared for the empty houses in the City.

These tables are important in view of the instruction that in estimating the rehousing need for the abatement of overcrowding the empty houses, and those to be vacated are, in so far as they are suitable, to be deducted from the number of houses required.

TABLES IV. AND V.

Memorandum "B" states that the Local Authority will make their first rough estimate of the accommodation required to abate overcrowding from the completed Form "C" (Tables "A" and "B"). For this purpose there can be estimated from the form the total numbers of two-roomed, three-roomed, four-roomed, etc., houses which would be required to rehouse the families shown to be overcrowded. From these totals are to be deducted the number of houses of the same sizes which would be left vacant by the removal of the overcrowded families. The number of vacant houses of the same sizes which were vacant at the time of the survey should also be deducted. The resulting estimate of need adjusted to take account of the difference between the overcrowding standard and the standard of section 37 of the 1930 Act would be only approximate, but in most cases would be sufficient to form the basis, at any rate, of the first rehousing proposals. This adjustment is in effect a change from "persons" to "individuals" and, broadly speaking, means no increase in the number of houses required, but an increase in the size of houses.

Table IV. has accordingly been prepared to assist in arriving at this estimate. It gives an analysis of overcrowded families in relation to empty houses and houses to be vacated, and shows the approximate number of houses required to abate overcrowding for each permitted number on the standard laid down by section 37 of the Housing Act, 1930.

The carrying out of the above instructions is a comparatively simple matter once the figures have been obtained, and if this method of estimation of need is to be strictly adhered to, then the table would indicate that 683 A2, 688 A3, and 730 B4 houses are required to abate overcrowding.

It must be pointed out, however, that such a literal interpretation of instructions and the application of such results to the relief of overcrowding would not in fact meet the situation.

From Table IV. it will be seen that there are in the City 190,361 separate families and 1,995 empty houses, giving a percentage of empty houses in relation to families of 1.04, and it must be remembered that in dealing with this situation a certain amount of fluidity is required to permit of any movement of the population from one house to another, and further, although the houses were recorded as empty on the date of survey the number is so small in relation to the whole that they offer no practical solution for the relief of the overcrowding problem. In addition, Table V., which gives the inclusive rentals of empty houses as far as they can be ascertained, shows that only 173 of the empty houses are to let at rentals below 15s. per week.

It has therefore been considered advisable not to deduct from the total requirement any of the empty houses. It has also been found more practical to group the overcrowded families and houses to be vacated into the following three groups:—

1. With a permitted number of 1 to 5 inclusive.
2. With a permitted number of $5\frac{1}{2}$ to $7\frac{1}{2}$ inclusive.
3. With a permitted number of 8 to 13 inclusive.

If rehousing were contemplated on this basis there would be a surplus of 328 houses in the first group. The second group would exhibit a deficiency of 1,103 houses and the third group a deficiency of 563 houses.

It has to be borne in mind that in offering suitable alternative accommodation section 12 of the 1935 Act specifies that the following conditions are to be satisfied :—

- (a) the house must be a house in which the occupier and his family can live without causing it to be overcrowded ;
- (b) the local authority must certify the house to be suitable to the needs of the occupier and his family as respects security of tenure and proximity to place of work and otherwise and to be suitable in relation to his means ; and
- (c) if the house belongs to the local authority, they must certify it to be suitable to the needs of the occupier and his family as respects extent of accommodation, having regard to the standard specified in paragraph (ii.) of section 37 of the Act of 1930.

It may be that in attempting to rehouse overcrowded families in houses which do not belong to the Corporation difficulties may arise in regard to clause (b) of section 12 of the Act, and if the local authority cannot certify that the house offered to the overcrowded family is suitable to the means of that family and within a reasonable distance of their place of work, then it would seem inevitable that the rehousing of the family should be undertaken by the Corporation.

It should be borne in mind that, in the subsequent framing of proposals for rehousing, a further consideration arises in relation to the accommodation provided, or likely to be provided, by private enterprise.

With regard to the construction of houses by private enterprise, it has been ascertained from the Town Planning and Buildings Department that 817 houses with amenities corresponding to the A2 municipal houses are in the course of erection, and will be let at an approximate rental of 10s. to 15s. 3d. per week, including rates. There are also over a hundred A3 houses with larger rooms being built to be let at a rental of from 17s. 6d. to 20s. per week.

There remains one further point, and that is the families living in houses just sufficiently large for their present needs and which are likely to become overcrowded within the next two years owing to the advancing age of the children. This must always be a variable factor in view of possible movement of population, dispersal of families, or reduction in the numbers living together by some other means.

Instructions are included in Memorandum " B " for obtaining the date of review for those houses which, if still occupied by the same family (which includes children under 10), are likely to become overcrowded within two years. Table VI. shows the number of families likely to become overcrowded in the course of the next five years.

It would therefore seem necessary that any estimate of houses required to abate overcrowding should be revised periodically to take account of such contingencies.

Revision has been foreseen in Memorandum " B " which further states—
" When the houses included in the first proposals of the authority have been completed, they should, when submitting further proposals for building, furnish a report to the Minister showing how far the accommodation already provided has abated overcrowding and to what extent the accommodation rendered vacant by the removal of overcrowded families has been reutilised. Experience gained in this way may lead the local authority to consider that their original estimate of need ought to be revised."

Memorandum " B " states that—" In choosing the houses to be included in the first specific proposals, the local authority will, of course, have regard to the necessity of relieving the worst cases of overcrowding first and the first proposals should include houses of proper types and suitably placed for this purpose."

A final analysis of the present position of housing needs can now be made.

In group 1 (permitted number of 1 to 5 persons) there is a surplus of existing houses, which must be considered available for rehousing, of 328, which is augmented by 817 houses in the course of erection by private enterprise, giving a total surplus of 1,145 houses.

In group 2 ($5\frac{1}{2}$ to $7\frac{1}{2}$ persons) there is a nett deficiency of 1,103 houses which will be reduced by the 100 houses of this type now being built by private enterprise. This gives a deficiency of 1,003 houses.

In group 3 (8 to 13 persons) there is a deficiency of 563 houses.

Thus the approximate number of houses required to abate the overcrowding as ascertained by the present survey, calculated as indicated above, would appear to be :—

Group II.	..	..	..	..	1,003 houses.
Group III.	..	..	..	..	563 houses.
<hr/>					
Total	..	..	..	..	1,566 houses.
<hr/>					

It should be understood that this total represents an estimate of need based on the supposition that it will be possible to utilise for rehousing purposes all the houses rendered vacant by deerowding operations and the new houses being built by private enterprise. It is, however, extremely likely that a considerable proportion of these houses will be found unsuitable for the purpose within the meaning of Section 12 of the Act, and that a revision of the above figure will be necessary. The proportion of unsuitable houses cannot be estimated and will only be revealed by actual experience.

It has not been considered advisable to make any deduction from this total of 1,566 houses for the overerowding which oeeurs in areas which may in future be dealt with as clearance areas nor has any allowance been made for the overcrowding which is known to exist in areas which have already been represented by the Medical Officer of Health for clearance. The reasons for this are :—

- (1) in relation to future clearance areas the annual revision of overerowding which is required to be done will reveal a nett balance on each occasion ascertained by due allowance being made for housing provision required in clearance schemes ;
and
- (2) that the survey of overerowding which has just been completed definitely excludes all those areas which have already been represented as clearance areas and for which housing is to be provided as part of the clearance work.

1,566 houses are to be taken as the requirement for the abatement of overerowding as revealed by this enquiry.

R. VEITCH CLARK,
Medical Officer of Health.

April 8th, 1936.

NUMBER OF FAMILIES CONTAINING THE NUMBER OF PERSONS IN THE FIRST COLUMN OCCUPYING DWELLINGS WITH THE PERMITTED NUMBER SHOWN AT THE HEAD OF THE COLUMN.

No. of persons in family	PERMITTED NUMBER																									No. of families overcrowded	No. of families not overcrowded
	0	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$6\frac{1}{2}$	7	$7\frac{1}{2}$	8	$8\frac{1}{2}$	9	$9\frac{1}{2}$	10	$10\frac{1}{2}$	11	$11\frac{1}{2}$	12 or over		
1	3	20	95	211	8,401	33	3,451	5	5	14	2,233	1	2	1	7	3,764	1	2	2	1	1,345	1	2	1	664	23	20,242
$1\frac{1}{2}$		1	2	18	174	3	203				92		1		1	165					38				17	3	712
2		7	23	58	1,663*	41	6,189	4	12	39	7,853	5	6	14	29	18,806	5	4	7	6	8,998	1	4	4	4,105	88	47,795*
$2\frac{1}{2}$		3	4	15	235	39	1,258	3	8	37	3,358	4	2	9	17	8,323	2	2	1	2	2,963	2	1		791	257	16,822
3			4	7	129	20	1,104	2	18	77	6,378	2	11	18	32	17,503	1	14	4	8	9,215	5	2	3	4,764	160	39,161
$3\frac{1}{2}$			2	2	44	3	212	1	2	23	1,855	2	5	2	9	5,078		3	2	1	2,227	1		2	888	263	10,101
4				4	15	6	269	7	32	171	2,088	8	14	34	30	10,119	10	10	9	8	6,033	5	1	8	3,568	301	22,148
$4\frac{1}{2}$					9	2	112	3	8	51	621	5	8	7	13	2,898		2	3	3	1,427	2			753	134	5,793
5				1	7	1	105	3	15	67	1,002	9	21	35	34	4,754	3	6	11	5	3,255	2	5	4	2,392	199	11,538
$5\frac{1}{2}$					3	2	43	2	6	29	347	4	22	34	26	1,536	1	1	2	4	727		2	2	585	432	2,946
6					1		33	5	5	37	441	25	112	295	191	905	10	19	18	5	1,545	2	5		1,390	547	4,497
$6\frac{1}{2}$					3	1	12	1	4	15	180	6	58	132	90	313	3	7	2	3	414	1		1	373	280	1,339
7							12	1	4	20	184	10	56	110	83	366	9	16	7	4	558		4	1	688	397	1,736
$7\frac{1}{2}$							5		1	5	75	5	19	50	35	143	3	7	3	4	195	1			215	195	571
8							2		2	7	62	6	16	29	29	129	29	49	36	14	45	1	1	4	347	282	526
$8\frac{1}{2}$							3	1	2	4	34	1	7	12	16	51	8	14	17	6	16			2	135	139	190
9										3	13	2	3	10	11	36	12	21	19	6	9	1			146	111	181
$9\frac{1}{2}$							1		1		7		2	1	7	17	3	4	7	2	8	1	3	2	40	50	56
10											3		1	4		8	3	3	3	3	4	1	5		45	28	55
$10\frac{1}{2}$											1				1	3		2	3		2			1	10	12	11
11															1	3	2			1	1	1			8	9	8
$11\frac{1}{2}$											1			1		1				1			1		4	5	4
12																1	1				1				7	3	7
$12\frac{1}{2}$																			1							1	
13																				1					2	1	2
Not overcrowded			95	229	10,238*	116	12,205	15	77	412	25,480	40	204	581	562	74,673	77	156	143	82	39,022	27	35	35	21,937		186,441*
Overcrowded ..	3	31	35	87	446	35	809	23	48	187	1,348	55	162	217	100	249	29	30	14	6	4	1	1		3,920	TOTAL	
Empty houses ..					4	2	38	1	3	13	141	13	41	40	74	188	35	121	103	49	93	46	75	76	839		1,995
Houses to be vacated ...				1	6	2	340	17	38	169	1,220	54	144	209	98	243	27	27	13	5	4	1	1				2,619

Overcrowded houses 3,920 Tables I and II.
" " " " " 37 Section 2(1)(a) (sex only).
Total 3,957 Families overcrowded.

* This figure includes 37 families overcrowded by mixing of sexes only.

FORM "C."—Return relating to Corporation
Houses in the City.

CITY OF MANCHESTER.

OVERCROWDING SURVEY.

Table "B"

NUMBER OF FAMILIES CONTAINING THE NUMBER OF PERSONS IN THE FIRST COLUMN OCCUPYING DWELLINGS
WITH THE PERMITTED NUMBER SHOWN AT HEAD OF COLUMN.

No. of persons in family	PERMITTED NUMBER																								Number of families overcrowded	Number of families not overcrowded	
	$\frac{1}{2}$	1	$1\frac{1}{2}$	2	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	$4\frac{1}{2}$	5	$5\frac{1}{2}$	6	$6\frac{1}{2}$	7	$7\frac{1}{2}$	8	$8\frac{1}{2}$	9	$9\frac{1}{2}$	10	$10\frac{1}{2}$	11	$11\frac{1}{2}$	12 or over			
1	1	2	2	191	1	443	1			101					75					47					1	863	
$1\frac{1}{2}$		1	4	5		8				14					9					2					1	42	
2		2	20	67	7	687	1		3	709	1	3	1	9	1,913			3		833					39	22	4,276
$2\frac{1}{2}$	1	1	3	11	10	86			2	496		1	6	6	2,149		1			431					35	16	3,223
3			1	3	3	58			10	820		3	2	6	3,155				2	1,280					84	7	5,420
$3\frac{1}{2}$						7		1	1	355		1		2	1,481			1		419					26	7	2,287
4				1	1	13			12	227	1	2	14	5	2,076	1	2	4	1	1,064					84	15	3,493
$4\frac{1}{2}$						6			3	96		1	3	2	825			1	1	302					34	6	1,268
5						4			3	81	1	9	16	3	1,000			1		609					73	7	1,793
$5\frac{1}{2}$						2				35	2	11	19	9	414			1	1	155					26	37	638
6										22	5	69	195	59	15	3		4		304					81	27	730
$6\frac{1}{2}$										13	1	28	78	30	7	1				83					19	42	218
7											6	26	63	16	8		1	4	1	118					43	95	191
$7\frac{1}{2}$										2	1	11	29	6				2		40					21	49	63
8												8	14	3	2	6	12	15	2	4					30	27	69
$8\frac{1}{2}$												4	9	1		2	3	6	1	1					11	16	22
9												1	3			3	2	6	1	1					20	9	28
$9\frac{1}{2}$												1					1	1		1					4	3	5
10													1		1			2	2	1					6	1	
$10\frac{1}{2}$																		2							2		
11																			1						1		
$11\frac{1}{2}$																											
12																				1					1		
$12\frac{1}{2}$																		1							1		
Not overcrowded		2	6	263	18	1,282	2	1	31	2,899	5	100	334	147	13,127	11	19	48	10	5,695					630		24,430
Overcrowded ...	2	4	24	15	4	32			3	72	13	79	119	10	3	5	3	6	3	1					398		TOTAL
Empty houses ...				2		7			1	10	1	19	13	8	3	4		12	3	12					2		97
Houses to be vacated ...						10				67	13	79	118	10	3	5	3	6	3	1							318

WARD TABLE

CITY OF MANCHESTER.
OVERCROWDING SURVEY.

Analysis of Wards.

OVERCROWDING SURVEY, 1936	Houses			Families		Population						Overcrowded Families		Houses to be vacated	Empty Houses
	Number surveyed	Number in survey	Average number per house	Individuals			Equivalent No. of persons			Number	Per cent.	Total number	Total number		
				Over 10	Under 10	Total	Average number per house	Total	Average number per house					Average number per family	
Bestor Totals	174,010	190,361	1.092	537,484	92,356	629,840	3.619	583,662	3.348	3.066	3,957	2.078	2,619	1,995	
.. .. .	4,209	5,763	1.369	14,411	2,614	17,025	4.044	15,718	3.734	2.727	144	2.394	48	90	
.. .. .	5,178	5,601	1.081	15,479	2,863	18,342	3.542	16,910½	3.265	3.019	145	2.588	113	38	
.. .. .	6,594	7,005	1.062	20,516	3,513	24,029	3.645	22,272½	3.377	3.179	300	4.254	227	16	
.. .. .	5,630	5,971	1.060	17,681	2,728	20,409	3.625	19,045	3.383	3.190	67	1.112	57	34	
.. .. .	6,518	6,928	1.061	21,480	3,880	25,360	3.891	23,420	3.593	3.409	311	4.488	222	69	
.. .. .	5,854	6,722	1.148	19,680	2,577	22,257	3.802	20,968½	3.581	3.119	39	0.580	18	79	
Hardy	8,424	8,690	1.031	25,812	3,025	28,837	3.423	27,324½	3.243	3.114	39	0.449	31	145	
.. .. .	2,758	3,100	1.124	9,724	1,815	11,539	4.184	10,631½	3.854	3.429	59	1.903	25	86	
.. .. .	3,153	3,366	1.067	9,743	1,912	11,655	3.696	10,699	3.393	3.166	184	5.377	127	7	
.. .. .	4,550	4,860	1.046	13,613	1,989	15,602	3.429	14,607½	3.210	3.005	45	0.989	21	81	
.. .. .	5,074	5,120	1.009	14,564	2,848	17,412	3.431	15,988	3.131	3.122	31	0.605	25	85	
.. .. .	11	11	1.000	28	3	31	2.818	29½	2.681	2.681	—	—	—	—	
.. .. .	5,836	6,332	1.084	17,943	2,436	20,379	3.492	19,161	3.283	3.026	174	2.746	125	22	
.. .. .	7,355	7,725	1.050	23,118	3,976	27,094	3.684	25,106	3.413	3.249	175	2.266	138	31	
.. .. .	5,378	5,952	1.106	16,423	2,646	19,069	3.546	17,746	3.299	2.981	114	1.915	67	15	
.. .. .	5,332	5,633	1.056	15,859	1,939	17,798	3.338	16,828½	3.156	2.987	25	0.468	17	90	
.. .. .	6,018	6,493	1.078	18,840	2,269	21,109	3.508	19,974½	3.319	3.076	23	0.354	16	104	
.. .. .	5,358	6,194	1.152	16,077	3,277	19,354	3.610	17,715½	3.306	2.860	117	1.888	74	41	
.. .. .	4,970	5,403	1.087	15,651	2,831	18,482	3.719	17,066½	3.433	3.158	225	5.130	195	10	
.. .. .	7,236	7,491	1.035	21,840	3,608	25,448	3.517	23,644	3.267	3.156	60	0.800	39	95	
.. .. .	4,342	5,916	1.362	15,150	2,399	17,549	4.042	16,349½	3.765	2.763	68	1.318	8	151	
.. .. .	4,556	5,373	1.179	15,296	2,222	17,518	3.843	16,407	3.162	2.681	15	0.278	2	148	
.. .. .	3,969	4,284	1.079	11,753	2,528	14,281	3.598	13,017	3.279	3.038	263	6.139	185	37	
.. .. .	5,600	5,985	1.068	17,711	2,802	20,513	3.663	19,112	3.412	3.193	194	3.240	119	26	
.. .. .	5,632	6,105	1.083	16,824	2,694	19,518	3.466	18,171	3.226	2.976	229	3.751	178	18	
.. .. .	88	115	1.306	262	47	309	3.511	285½	3.224	2.482	1	0.869	1	1	
.. .. .	4,370	4,725	1.081	12,847	1,739	14,586	3.337	13,716½	3.138	2.902	25	0.529	18	36	
.. .. .	2	2	1.000	6	—	6	3.000	6	3.000	3.000	—	—	—	—	
.. .. .	282	354	1.255	906	146	1,052	3.730	979	3.471	2.765	15	4.237	2	4	
.. .. .	6,226	6,713	1.078	18,006	3,758	21,764	3.495	19,885	3.193	2.962	129	1.772	87	55	
.. .. .	764	999	1.307	2,566	522	3,088	4.041	2,827	3.700	2.828	29	2.902	11	7	
.. .. .	5,689	7,350	1.291	19,262	3,326	22,588	3.970	20,925	3.676	2.846	182	2.476	31	101	
.. .. .	5,484	5,800	1.057	16,332	2,917	19,249	3.510	17,790½	3.244	3.067	187	3.224	162	27	
.. .. .	3,646	4,133	1.133	11,379	2,576	13,955	3.827	12,667	3.472	3.063	193	4.669	156	23	
.. .. .	10,820	11,063	1.022	32,800	6,085	38,885	3.593	35,842½	3.312	3.230	85	0.768	54	103	
.. .. .	7,104	7,084	0.997	17,902	5,846	23,748	3.342	20,825	2.931	2.935	35	0.494	20	120	

Table I.*Number and Size of Overcrowded Families.*

Number of equivalent adults in family.	Number of families of these sizes surveyed.	Number of families of these sizes overcrowded.			Percentage of families of these sizes overcrowded.
		(a) In Corporation houses.	(b) In Other houses.	(c) Total.	
1	20,265	1	22	23	0.113
1½	715	1	2	3	0.419
2	47,883	22	103*	125*	0.260
2½	17,079	16	241	257	1.493
3	39,321	7	153	160	0.406
3½	10,364	7	256	263	2.533
4	22,449	15	286	301	1.385
4½	5,927	6	128	134	2.260
5	11,737	7	192	199	1.695
5½	3,378	37	395	432	12.788
6	5,044	27	520	547	10.844
6½	1,619	42	238	280	17.294
7	2,133	95	302	397	18.612
7½	766	49	146	195	25.456
8	808	27	255	282	34.900
8½	329	16	123	139	42.249
9	292	9	102	111	38.561
9½	106	3	47	50	47.169
10	83	6	22	28	33.734
10½	23	2	10	12	52.171
11	17	1	8	9	52.941
11½	9	—	5	5	55.555
12	10	1	2	3	30.000
12½	1	1	—	1	100.000
13	3	—	1	1	33.333
Total ..	190,361	398	3,559*	3,957*	2.078

* Includes 37 families overcrowded by mixing of sexes only.

Extent of Accommodation to be Vacated by Decrowding.

Permitted No. of Occupants	Number of Houses to be Vacated		
	(a) Corporation	(b) Other	Total
1	...	...	...
1½	...	1	1
2	...	6	6
2½	...	2	2
3	10	330	340
3½	...	17	17
4	...	38	38
4½	...	169	169
5	67	1,153	1,220
5½	13	41	54
6	79	65	144
6½	118	91	209
7	10	88	93
7½	3	240	243
8	5	22	27
8½	3	24	27
9	6	7	13
9½	3	2	5
10	1	3	4
10½	...	1	1
11	...	1	1
11½	...	...	...
12 or over	...	...	...
Total	318	2,301	2,619

Table III.

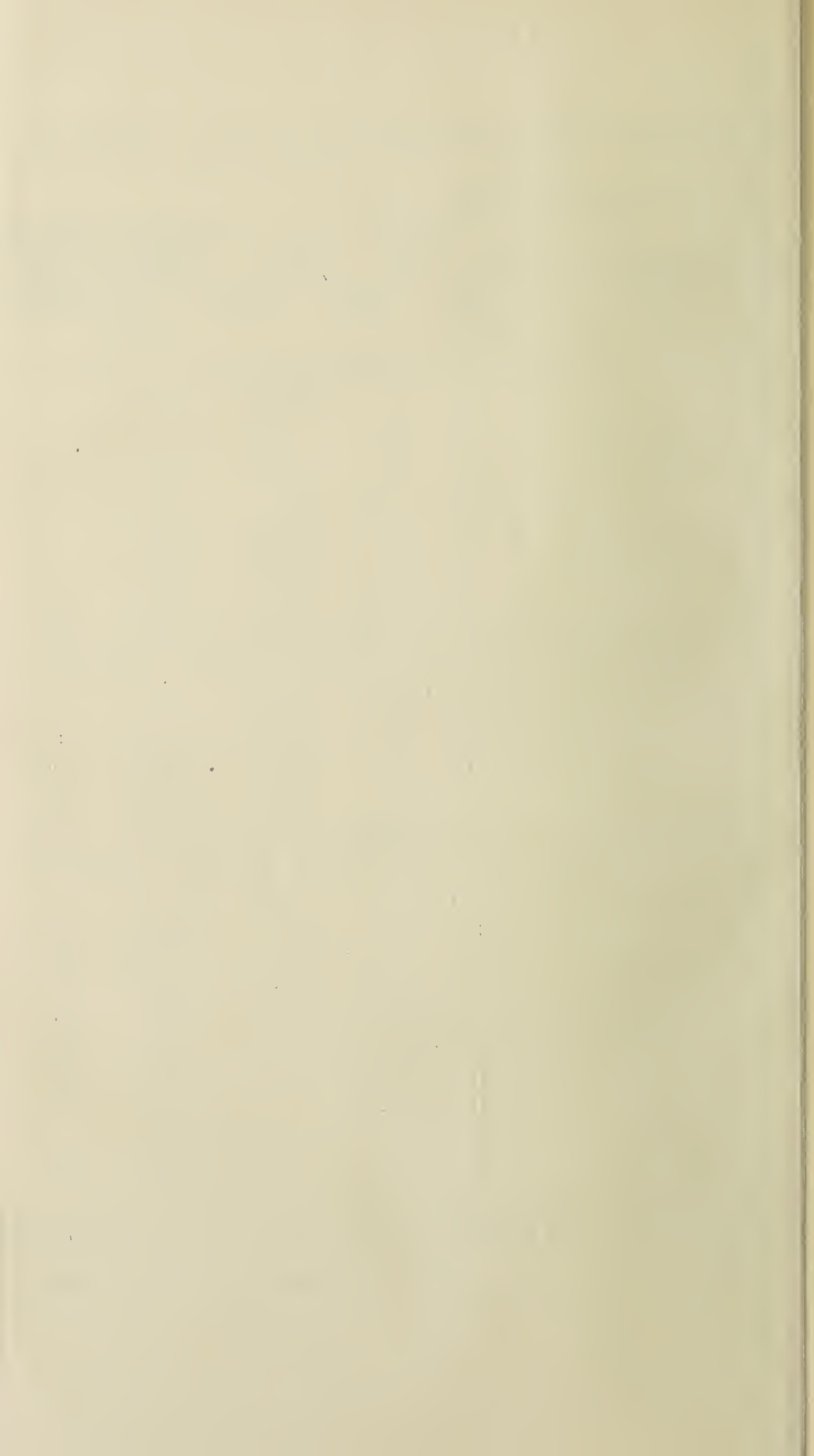
*Extent of Accommodation of Empty Houses according to
their "Permitted Number."*

Permitted Number of Occupants	Number of Empty Houses		
	(a) Corporation	(b) Other	TOTAL
1	...	...	...
1½	...	...	...
2	2	2	4
2½	...	2	2
3	7	31	38
3½	...	1	1
4	...	3	3
4½	1	12	13
5	10	131	141
5½	1	12	13
6	19	22	41
6½	13	27	40
7	8	66	74
7½	3	185	188
8	4	31	35
8½	...	121	121
9	12	91	103
9½	3	46	49
10	12	81	93
10½	...	46	46
11	...	75	75
11½	...	76	76
12 or over	2	837	839
TOTAL	97	1,898	1,995

Table IV.

ACCOMMODATION AVAILABLE OR REQUIRED FOR THE ABATEMENT OF OVERCROWDING.

Group number	Number of persons in family	Number of families	Number of families over-crowded	Number of empty houses of the requisite permitted number	Number of houses of the requisite permitted number to be vacated	Total number of houses of the requisite permitted number available for rehousing	Number of houses required if empty houses are utilised for rehousing			Number of houses required if empty houses are not utilised for rehousing.			Number of houses required if empty houses are not utilised for rehousing.			Number of houses required if empty houses are not utilised for rehousing.		
							Number of houses required	Number of surplus houses	Nett surplus or deficiency of houses in each group	Approximate number and type of houses required under Section 37, Housing Act, 1930			Number of houses required	Number of surplus houses	Nett surplus or deficiency of houses in each group	Approximate number and type of houses required under Section 37, Housing Act, 1930		
										A 2	A 3	B 4				A 2	A 3	A 4
1	1	20,265	23	..	..	..	23	..	..	23	..	..	23	..	..	..	..	..
	1½	715	3	..	1	1	2	..	..	2	..	..	2	..	..	..	..	..
	2	47,883	125	4	6	10	115	..	..	115	..	..	119	..	..	..	..	..
	2½	17,079	257	2	2	4	253	..	..	253	..	..	255	..	..	..	..	..
	3	39,321	160	38	340	378	..	218	..	..	..	..	..	180	..	..	..	..
	3½	10,364	263	1	17	18	245	..	..	134	111	..	246	..	..	..	..	..
	4	22,449	301	3	38	41	260	..	..	156	104	..	263	..	..	..	..	..
	4½	5,927	134	13	169	182	..	48	..	..	..	..	..	35	..	..	..	..
	5	11,737	199	141	1,220	1,361	..	1,162	..	..	..	..	..	1,021	..	..	..	..
				GROUP	TOTAL .. ..	.. .. ..	898	1,428	+ 530	..	..	..	908	1,236	+ 328			
2	5½	3,378	432	13	54	67	365	..	..	..	225	140	378	..	..	..	233	115
	6	5,044	547	41	144	185	362	..	..	..	248	114	403	..	..	..	276	127
	6½	1,619	280	40	209	249	31	..	..	..	..	31	71	..	..	..	..	71
	7	2,133	397	74	98	172	225	..	..	..	..	225	299	..	..	..	..	251
	7½	766	195	188	243	431	..	236	..	..	..	..	..	48	..	..	..	..
				GROUP	TOTAL .. ..	.. .. ..	983	236	— 747				1,151	48	— 1,103			
3	8	808	282	35	27	62	220	..	..	..	..	220	255	..	..	..	..	255
	8½	329	139	121	27	148	..	9	..	..	..	..	112	..	..	..	..	112
	9	292	111	103	13	116	..	5	..	..	..	..	98	..	..	..	..	98
	9½	106	50	49	5	54	..	4	..	..	..	..	45	..	..	..	..	45
	10	83	28	93	4	97	..	69	..	..	..	..	24	..	..	..	..	24
	10½	23	12	46	1	47	..	35	..	..	..	..	11	..	..	..	..	11
	11	17	9	75	1	76	..	67	..	..	..	..	8	..	..	..	..	8
	11½	9	5	76	..	76	..	71	..	..	..	..	5	..	..	..	..	5
	12	10	3	839	..	839	..	834	..	..	..	..	5	..	..	..	..	5
	12½	1	1															
	13	3	1															
				GROUP	TOTAL .. ..	.. .. ..	220	1,094	+ 874	..	..	..	563	..	— 563			
TOTAL ..		190,361	3,957	1,995	2,619	4,614	2,101	2,758		683	688	730	2,622	1,284		..	509	1,157



RENTALS OF EMPTY HOUSES OF PERMITTED NUMBER SIZES.

Table V.

Weekly inclusive rentals	Permitted Number																						Total	Weekly inclusive rentals
	1	1½	2	2½	3	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9	9½	10	10½	11	11½			12 or over
3 to 3/11																								From 3/- to 9/11
4/- " 4/11			3																					3
5/- " 5/11			1		2																			3
6/- " 6/11				1	4		1		3					2										11
7/- " 7/11					1		1	2	3				1	3										11
8/- " 8/11									4			1	2	5										12
9/- " 9/11									4			1	3	3	1	1	1							14
10/- " 10/11					3				4			1	5	7		2	2	1						1 26
11/- " 11/11								1	5				1	5			1							13
12/- " 12/11					1				6		5	2	5	4	1	1		1						2 28
13/- " 13/11									1	2		2	2	3	1	2		1	3			1		3 21
14/- " 14/11					1			1	8			5	2	5	1			2			2			4 31
15/- " 15/11					2		1	1	4		1			10	2	1	3	3	3	4	1	3		16 55
16/- " 16/11								1	2	1	4		1	7	1	3		2	1	1	5	3		6 38
17/- " 17/11									5	2			1	7	5	3	4	2	5	3	3	8		31 79
18/- " 18/11									1			2	2	10	1	12	6	7	14	4	11	9		68 147
19/- " 19/11									1				1	2	1	2	5	2	3	1	6	7		33 64
20/- " 20/11									5			1	2	5		8	4	6	9	2	13	9		113 177
21/- " 21/11									2		2	1		1		2		2		2	4			44 60
22/- " 22/11									1						2	1	2	1	3	1	1	4		66 82
23/- " 23/11					1				1		1			1		2								31 37
24/- " 24/11															1		1			2	1			14 19
25/- " 25/11									2			1	3	4		1	2				1	1		43 58
26/- and over					1				2					3	1		1	1	8	1		1		40 59
Rent unobtainable				2	22	1		6	71	6	18	18	41	88	16	44	59	17	42	23	24	24		296 818
For sale								1	4	2	10	5	2	14	1	37	13	1	2	4	3	2		28 129
Total .. .			4	3	38	1	3	13	139	13	41	40	74	189	35	122	104	49	93	44	74	77		839 1,995 1,995

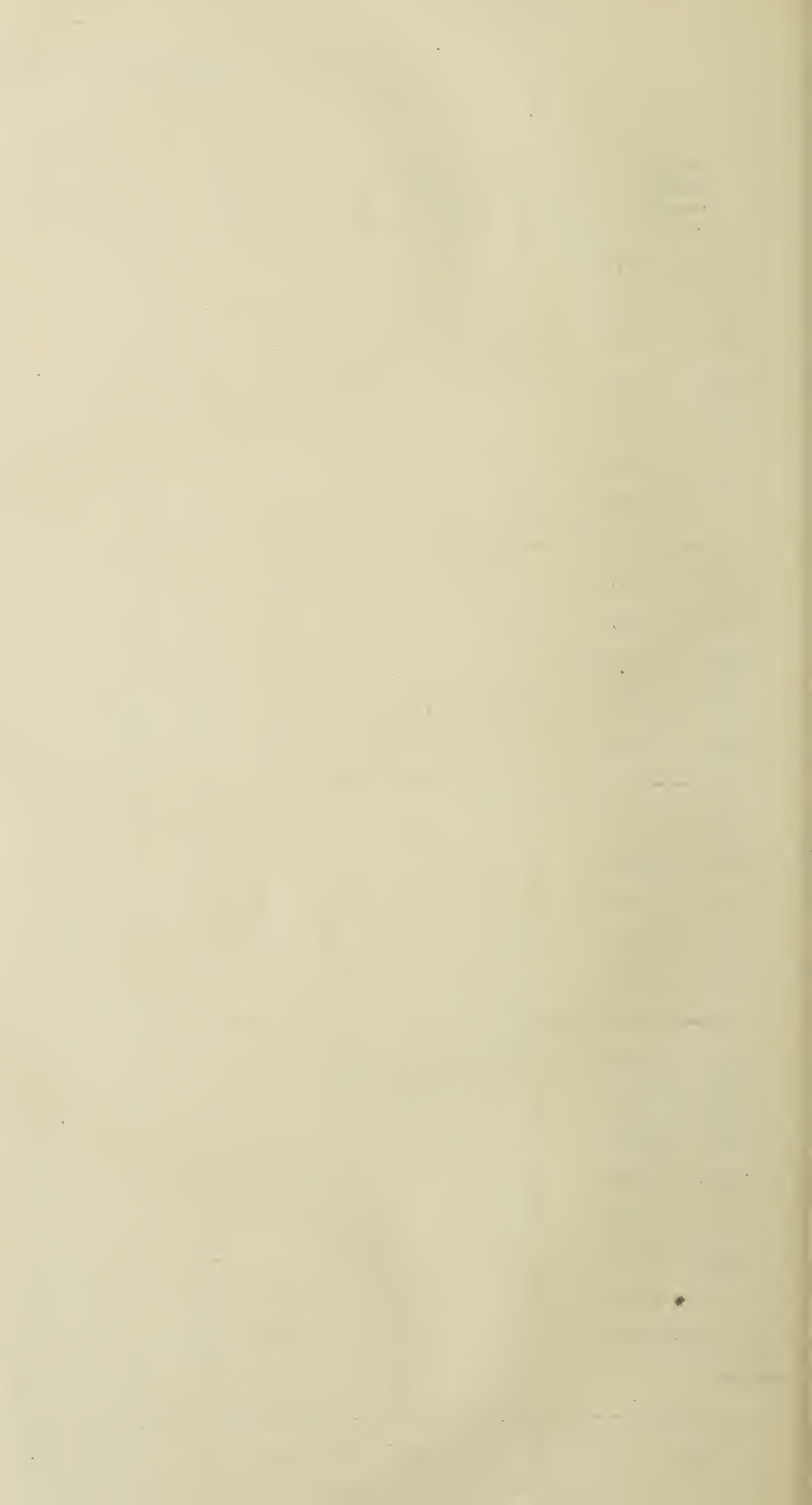


Table VI.

*Number of Families Likely to Become Overcrowded in the
Years Indicated.*

Year	Number of Families
1936	483
1937	301
1938	257
1939	251
Total	1,535

THE HUMAN SIDE OF SLUM CLEARANCE.

“A report of an Independent Enquiry by three Social Workers into the operation of the rehousing activities of the Corporation so far as it has affected approximately 500 of the families transferred from a Clearance Area to the various Corporation Housing Estates.”

That part of Hulme which is bounded by Clarendon Street, Newcastle Street, George Street, Medlock Street to City Road, and Great Jackson Street, was the scene of the first slum clearance undertaken by the Manchester Corporation under the Housing Act, 1930.

Of the first 500 families who were moved under that clearance order, and who were rehoused on Corporation estates, 408 have been visited, and this report seeks to show—

1. How tenants are reacting to their new environment.
2. Whether, now that they have been in residence for a period of at least some months, they would wish to return to their old houses.
3. In what respect they feel that they have benefited by the change, and so do not wish to return.
4. Whether the fact that there have been, in many cases, increases in rent and in the cost of transport is outweighed by the amenities, improvement in health, or other causes.

That part of Hulme which was cleared had been known as a condemned area for more than twenty years. The greater part of the property had fallen into a very bad state of repair, and there was little encouragement to tenants to try to keep their houses decent and tidy—although a high proportion succeeded in doing so.

A high percentage of the houses were vermin ridden, and that generally through no fault of the tenants, but simply because there was no real remedy except the pulling down of the property.

All the tenants visited during this enquiry had been moved compulsorily after living in a district which, being the first area to be cleared in the City, had been the scene of many disturbances and demonstrations likely to unsettle the minds of residents and to make them frightened, suspicious, and resentful, and therefore proportionately difficult to rehouse.

Again, being the first area to be cleared, the district was the subject of the first Slum Clearance Inquiry to be held in the town under the Housing Act, 1930, and thus gained an exaggerated publicity. Tenants were urged by conflicting interests to give evidence at the Inquiry and were interviewed by press representatives, and feelings of alarm and excitement were stirred up.

It says much for both sides—for the amazing courage and adaptability of the tenants who were moved and for the sympathetic understanding of the officials—that the relationship is, in the great majority of cases, satisfactory.

During this investigation in no single instance did a tenant make complaint of calculated bad treatment ; indeed the general pronouncement on the official who was largely responsible for the recommendations for the placing of tenants, and therefore the one with whom they came into personal contact, was, “ To speak fair of Mr....., he done his best.”

Whilst the Hulme area was being cleared the Corporation set up a committee composed entirely of non-official people, mostly with some local connection or knowledge, which sat twice weekly in the area in order that there might be some body to which tenants who were in any difficulty, or who needed advice, and were unable, either through inconvenient hours of work, or who were too timid to interview officials, might go for help.

It was largely through experience gained on that committee and, through its working, of the difficulties and anxieties which confronted many tenants, that two members of the committee decided to visit tenants after removal and try to discover how the change from crowded streets and overcrowded houses to the open spaces and well-planned houses had affected them. They were helped by a third investigator with knowledge of housing, and their work was made easy by the courtesy and the willingness to be interviewed of the tenants themselves. It was, in fact, that eager response to interest that made the main recommendation of this report appear necessary.

Slum clearance has been for many years a vague aspiration—something that might possibly be attempted some day. Some attempt, at least, has been made to meet other housing needs, but it required the removal of all housing subsidies except that for slum clearance to enable local authorities to tackle the problem of the clearing of the slums.

To contrast the conflicting methods of dealing with the clearing of the slums is not the object of this report, nor does it come within the scope of this investigation. Its sole aim is to try to provide some information on which to judge whether the people who have been moved from Hulme into the various Corporation housing estates are settling happily, and if they are able to say whether they can, themselves, see any benefit from their change of living.

There are still many who say (and doubtless believe) that the first difficulty of any clearance scheme lies in the fact that people who live in crowded areas love the mean streets and old and dirty houses and cannot be persuaded to leave them willingly, and that, having been compulsorily moved, they drift back to the district from which they have come. This theory does not bear investigation. It is true that many tenants fear removal because their margin

The results of this method appear to be wholly good. Where tenants have been spaced out among older established tenants the example of the older residents was easily apparent. One interesting manifestation of this is to be seen in the type of window curtains generally in use. It is rare, nowadays to see a window on any housing estate without tasteful curtains, and the arrival of tenants from the Hulme area has done nothing to alter this. In an amazingly short space of time they have almost unanimously given up the covering of their windows with curtains that prevent the admittance of light and sun and air. There did not appear to be much evidence that neighbours have made them feel unwelcome, although on some estates they felt that they were looked upon with suspicion, and they were inclined to put that down partly at least to the publicity on disinfestation at the time of removal and partly because they were poor. In a few instances mothers thought their children were looked down upon. These cases were usually qualified by, "At least we thought so at first," and, as one woman said, "It only needs someone to be ill either in their houses or in ours for us all to feel friendly."

Lengthy unemployment has naturally in many cases depressed and embittered families, and made it difficult for them to settle contentedly anywhere, but even there the interest of the change and of a new house, with its amenities, and a garden, does much to help. Some men who had been unemployed for a long time expressed themselves quite definitely on the point, "You can take it from me," said one, "this slum clearance is the best thing that has happened for us for years," and a friend, also unemployed and also rehoused, supported him.

The dates of removal varied between April, 1934, and December, 1934, and the visiting was done in February, March, and April, 1935, so that, in many cases, at the date they were interviewed families had not seen a summer in their new surroundings and had only been living in their new homes for the worst and darkest part of the year. They had, therefore, seen only the least pleasant side of life in new estates, but in spite of that fact, with the exception of tenants living in one district where there were complaints of dampness, almost complete unanimity of approval was expressed. "We can go to bed and expect to sleep," one man said, "on hot nights we often used to sit on the pavements all night through."

Numerous tales were told of heartbreaking struggles to keep old houses clean. One young wife said that she and her husband and two children had come to Manchester six years ago and had taken a house thinking it was alright. "I cried all the first week," she said; "after that we got rid of the worst and could just manage to keep the place clean." Many said that disinfectant and paint, etc., had been a constant cost and that, even with such care as they could give, if they were away for a day or two they had to begin again,

Many will remember the outburst of excitement and annoyance over the question of fumigation during the removals. The fumigation of houses and furnishings by hydrocyanic acid gas was used in all cases. The practical application of this method of fumigation in slum clearance work was first worked out and applied by the Public Health Department of this City, and Manchester may be justly proud of the fact that this process is being widely recognised as highly efficient and probably the best available method of disinfestation. Tenants were generally willing and even glad to avert any risk of taking vermin into their new houses in furniture and willing to have their household goods disinfested. The order that personal clothing should be fumigated was objected to, and through a misunderstanding in the minds of the tenants a good deal of feeling was stirred up—largely by people who did not themselves live in the area. It was for this reason that the need for some visiting of tenants before removal first specifically arose.

Many of those who were roused to resentment by the idea of "personal" bathing and fumigation of clothing when it was first ordered now agree that it is a good measure. Indeed, considerable annoyance is felt if later arrivals are reported to have missed fumigation: not of the "we were done and so you must be" type of annoyance, but a fear of anything being brought into clean houses. It is probable that if there had been more explanation of what was intended as a great help a good deal of unnecessary distress of mind might have been avoided.

Again, tenants had often learnt with difficulty and expense many things that they could easily have been taught. For instance, back-to-back grates are, it is generally agreed, most satisfactory, and it is certain that lists of instructions are supplied to tenants. It is, however, easy to see that tenants moved under upsetting circumstances, often bewildered and fearful of the future, possibly with large families of young children, are too confused to read and understand lists of instructions. In many cases they had learnt with difficulty what could easily have been demonstrated. In one estate a rather helpless type of young wife had not had the least idea how to get the best and most economical use of her grate. She said that neither of her neighbours had been able to help her, and that in the end a "very kind" window cleaner had taught the occupants of the whole row of houses just what they could get out of their grates.

Large bills, ranging from 1s. 6d. to 16s., had followed the use of the wrong kind of bulb or of some other inexperience in the use of electricity, and these might have been avoided if more advice had been available.

For none of these mishaps, of course, is it possible to blame officials. They do explain, and their patience is often a thing to marvel at, but at the time when their explanations and advice are given the tenants are going through so disturbing an experience that they are unable to assimilate advice unless it is given to them very simply and in their own homes.

Would they go back ?

A good deal of publicity followed the Hulme Slum Clearance, and many wild and vague statements were made—

- “ They are all going back ”
- “ They are miserably unhappy ”
- “ Everyone knows they can’t settle down ”
- “ They don’t want gardens ”
- “ Do you know they keep the coal in the bath ? ”

and the like. And so, in order to discover how much truth there might be in any of these sayings, the question was asked in every case : “ Would you go back to live in Hulme again if you could, and if you do not want to go back will you say why you prefer living where you are now ? ”

The replies were overwhelmingly against return, and the following table gives the figures and the reasons given :—

Would not go back (Total)	On account of health	Children’s health	Amenities	Garden
304	32	46	199	27

Some of the hardest cases were found in those who valued the change for reasons of health. In one case an ex-service man with partial paralysis and T.B. is in a flat where he can move about and even get outside occasionally. For several years he had been tied to one room with no view except into a backyard, and, as there were no sanitary arrangements inside the house, as his wife said, no one but she, who had looked after him, knew what the change meant. To sit in the window and see green trees was, he said, like heaven.

In 46 cases the health of the children was given as the main reason, and in practically every case as a supplementary one—children with records of debility, nervous complaints, and bone diseases, who had frequently spent a good deal of their lives in hospitals, and who had responded in the rapid way in which children do respond, to good air, better houses, and, most important of all, room to play.

Many stories in illustration could be told if space permitted—just two may be allowed. One father, found struggling with his lawn, said that he had never hoped to have such a garden—but “ Our Emily ” when she saw it said—“ And can I go and play in that field when we live there ? ”

In the course of another visit, when a mother was explaining that they had put Wythenshawe as their first choice of district because of the delicacy of one little girl, the door burst open and a red-cheeked little girl bounced in and said : “ Can I have a butty and go in the park with Clarice ? ” “ Yes,” said the mother, “ that was the one who was never well in Hulme. ”

Appetites had developed, and many children who "never ate any breakfast," or who "would only have cake for breakfast" now clamour for bread and butter.

"Believe me," said one father, "my children call for bread and butter in the middle of the night."

"They wouldn't eat it unless they had a relish to it in Hulme, but plain bread and butter suits 'em in Barlow Moor," said another. Everywhere the improvement in the health of the children was commented upon, and always with the bread and butter refrain.

Amenities.

Of all the amenities the bathroom is easily favourite; it was quoted by many as a thing that alone made the move worth while. Most people have heard the "coal in the bath" legend, and so it was interesting to find that it was usually the baby that was having a bath, and the coal was invariably in the coalhouse.

One story really should be told. An old soldier living with a son who worked at night, and who had married children living near, said that, when he had got his son off to work, "me and the cat sit up until nine o'clock and then if no-one has come to see us we have an hour in the bathroom and we go to bed." When he wanted to cheer himself up, he said, he went to Hulme and looked at the backyards, and saw what he had left.

The back-to-back grates were much liked, and, as a rule, very nicely kept. And, whilst talking of how much easier the houses were to keep clean, many tenants made the significant comment that they were able to make their houses smell nice, and it had been hard to do that in an old house.

Gardens.

The number of tenants who gave a garden as their chief reason for settling happily was comparatively small, but it must be remembered that this report deals only with those who had lived, in the great majority of cases for many years, in a district where there were no gardens, and had therefore little knowledge of their possibilities. The love for something green and growing is, however, hard to kill, and, despite the discouragement of smoke and lack of sun under the old conditions, many window gardens and box gardens had been cultivated and had given a lot of pleasure, and had aroused in their owners the desire for bigger fields to conquer. Remembering this it is perhaps not so amazing to see with what goodwill they have set about digging and preparing the ground; and, although they are often completely unskilled, what ambitious projects prevail. Lack of money to buy tools, plants, and seeds is the real difficulty. One boy was found digging with an old fire shovel, but, even so, he was sure that he was going to have a garden.

In some Corporation estates residents have formed Garden Guilds, and tenants who join these are able, for a very small subscription, to get the use of gardening tools and also the advice and help of earlier members of the Guild. The Housing Department also provides the use of two expert gardeners on Corporation estates. A good deal of use is made of their services, but the areas which they serve are large and widely scattered, and tenants are often some time before they get into touch with them.

Last summer many of the tenants who were moved in the early part of the year had amazingly beautiful gardens and grew both flowers and vegetables with great success, but with those more recently removed, except in rare instances, where there is some real knowledge of gardening, it is at present more experiment than anything. Still, after all, there is perhaps more excitement in wondering what on earth things will be like and in not knowing by sight a delphinium from a michaelmas daisy than in the bored discrimination of experience.

The spirit of neighbourliness stood out there, too. In one row of gardens several had carnation cuttings, and, when they were admired, a tenant said: "Yes, the gardener from a big house we pass going to fetch the children from school, gave us those." And in quite another district a farmer had given rose tree cuttings to several, and had shown them how to strike them.

Already some vegetables were planned and planted, but again the cost prevented many from attempting any but the simplest form of vegetable gardening. At any rate it can safely be said that the possession of a garden appears to be highly valued, and a great number of women said how much they were looking forward to the summer when they would be able to "sit in our own garden" and "use our own vegetables." In some parts complaints were made of lack of privacy at the back of the houses owing to the fact that the Corporation keep the hedges cut back to about a foot in height. If they were told that this is in order that the hedges may be strengthened they would be satisfied, but they complain that children can step over from garden to garden and that there is no privacy at all. The cases where gardens were felt to be too large were usually those belonging to elderly couples or single persons, who could not easily attend to them themselves, and who had no one to ask to do it for them. A little place in which to sit on sunny days would be enough for most old folks, although it sometimes happens that a son without a garden comes to look after the garden and enjoys it. From another angle, one man who had for several years done night work in a rubber factory, said that he had never been able to get the smell of rubber out of his lungs, and that now he could come home and have an hour's digging, and go to bed refreshed and cleared.

In 23 cases tenants had removed or exchanged, and the reason for this was not always known. In those cases where it was possible to find any reason for removal, either inability to afford the increased cost or desire to be nearer town usually appeared to be the cause. The following table gives the figures of cases where whole families would like to go back to the district from which they had come :—

All the family would go back	All the family would go back but not to a dirty house	Total
8	14	22

This group was composed of those families which were suffering from some sense of grievance, either because they felt that they had had no choice of in removal or because they were poor, and in some odd cases of young couples who felt they could not be happy so far out of town. They did not appear to be representative of any particular type, but there generally seemed to be some reason for real depression. Serious illness, big families of young children, with a delicate mother, or the despair caused through lengthy unemployment were the main causes. Surprisingly few seemed to be missing the excitement of town life. "We could always go and look at Paulden's windows even if we hadn't anything to spend," said one otherwise satisfied tenant, and, "Woolworth's costs you nothing to look round," said another. On the remoter estates the cheap cinema was missed by some families. These were often of recent removal, and, with a little time in which to get used to the change, will settle happily ; or they will exchange with some family that wants to go further out. Even in these cases there were no small children who were not both better and liking the change. One of the interesting points about this table is the fact that in most of the cases, even where there was dissatisfaction, there was also the determination not to go back to a dirty house, so that, even in the least successful cases, a considerable amount of good had already been done.

The next table gives those cases where family opinion is divided ; where the family as a group would not go back, but of which one member has not yet fully settled ; the odd member being usually subject to severe criticism by the rest of the family :—

Husband would go back ; rest would not	Wife would ; rest not	Young men would ; rest not	Girls would ; rest not	Children would	Total
6	13	4	1	0	24 individuals

It will be seen that in a few cases wives had felt some loneliness after leaving their friends and relatives and familiar surroundings, and, being the member of the family who is in the house all day, had felt the change more than the rest of the family. Being accustomed to neighbours of long standing all around them they felt forlorn and lonely amongst strangers. Oddly enough, although the feeling was not usually strong enough to make them feel they would definitely go back, a certain amount of dissatisfaction was expressed amongst young men between 16 and 20 years old, who had left friends in Hulme and were missing them. In a number of cases they appeared to be in the habit of visiting their old friends every night. Evidently young men have fewer resources than their sisters and depend more upon the companionship of their own sex.

All these are, of course, transition difficulties, inseparable from removals on any large scale, and even these, after only a few months' residence, appeared to be lifting. "Of course it felt strange at first," we were told, "and we didn't know how we were going to afford it," but the large majority indignantly denied that there was any truth at all in the statement that there were many who would go back. One dissatisfied family is more noticeable than a number of satisfied ones, and one misplaced family can stir up discontent amongst others settled nearby who otherwise would settle comfortably. A most significant fact was that in no single instance did children want to go back. "Oh no, the children wouldn't go back. They love it." "Why," said one mother, "I can't even get our Agnes to go shopping with me in Hulme, she's that frightened we are going back to live there," and another said that she had only to threaten a return to have them all in tears.

This must be a great source of satisfaction to all those housing reformers who have been for a number of years trying to bring to public notice the fact that there were over two million children living in the slums. They can be perfectly sure that, at least,

THE CHILDREN LIKE IT.

They are naughtier, we were told; they run wild, and they climb trees. The only thing that seems surprising is that in the short space of a few months they can recover from the constriction of the crowded streets and learn to climb trees.

It might have been expected that old people would resent being moved, but, in spite of a natural loyalty to a district where life held memories for them, they generally seem especially satisfied. One old lady said that she had not expected to live amongst green trees until she was taken to the Southern Cemetery, and that she would not go back if she was offered the Town Hall clock.

There were 40 cases where tenants who liked their new houses, and did not want to leave them, were afraid they would be forced to do so because of the extra cost of living. The following table shows in what respect they felt the strain :—

Increase in rent	Increase in cost of transport	General expense	Total
10	7	23	40

and, again, out of this number 14 definitely refused to consider going to a dirty house. "Once you've got out," said one, "you'd do anything rather than go back." These figures do not include those families where the combined family income just suffices and where there is anxiety in case one of the wage earners should get married or have to leave home.

Analysis of Figures.

Out of a total of 408 families visited 304 would not go back for the following reasons :—

Health	Children's health	Amenities	Garden	Total
32	46	199	27	304

Next, there are these families of which single members would go back :—

Husband would go back ; rest would not	Wife would ; rest not	Young men would ; rest not	Girls would ; rest not	Children would	Total
6	13	4	1	0	24

All the family would go back	All the family would go back, but not to a dirty house	Total
8	14	22

Do not want to go back but are unsure they can afford to stay :—

Increase in rent	Increase in cost of transport	General expense	Total
10	7	23	40

It will be seen, therefore, that 304, or 75 per cent., are satisfied, and that the remaining 104, or 25 per cent., was divided as follows:—

ALL in family want to return	22, or 5 per cent.
Opinion in family divided	24, or 6 per cent.
Afraid necessity may compel return	40, or 10 per cent.
No information obtainable	18, or 4 per cent.

In some cases tenants are allowed a rebate on the rent by the Corporation. In order to calculate the amount which may be allowed the Atwater-Clark scale of family maintenance is used.

This scale allows—

<i>Personal Allowances—</i>		s. d.
(food, special allowance for children	Man and wife	14 6
under five, household sundries,	Sons, 17 and over	9 6
including clothing, boots, shoes,	Sons, 14 to 16	8 6
fuel, soap, and cleaning materials,	Daughters, 17 and over	8 6
etc.)	Daughters, 14 to 16	8 0
	Children, 10 to 13	4 0
	„ 6 to 9	3 6
	„ 5	3 0
	„ 2 to 4	5 0
	„ 0 to 1	4 6
	(excluding rent).	

To this is added a Family Allowance covering—
(recreation, amusement, travelling, tobacco, sweets, medical attention other than National Health Insurance — i.e., expenses outside the bare necessities of continued physical health).

Family Allowance	4 6
--------------------------	-----

For example, a family consisting of man and wife and three dependent children under this scale would need:—

	s. d.	
Man and wife	14 6	
Girl (11)	4 0	
Boy (10)	4 0	
Boy (5)	3 0	
	-----	£ s. d.
Total (excluding rent)		1 5 6
Plus family allowance		0 4 6

		£1 10 0 .
		=====

Where the family income falls below this scale a rent rebate is allowed. Alternatively, where tenants are in receipt of a grant from the Public Assistance Committee, rent rebates are allowed in the form of a rebate which makes the new rent the same as the rent which was paid before removal, plus 9d. for electricity, so that no extra charge falls upon the Public Assistance Committee. Any application for a rent rebate, after removal, on account of a change in circumstances, must be sent in during the first month of residence.

These rebates have been most helpful to many families. At the same time it is impossible to deny the fact that nearly every family moved is living at some greater cost than before they were moved, after allowing for rebate. What they are getting for this extra cost may be worth it many times over, but if they cannot afford to pay for anything extra they have to make sacrifices, and it may not be possible to manage it.

(Since this investigation was made the family allowance under this scale has been augmented by individual children's allowances, which will help to remove the worst anomalies. Also the date, after removal, for which application for a rent rebate on account of changed family circumstances may be made, has been extended from one month to six months. Both these changes are retrospective over the past six months.)

The following table shows the increases in rent after allowing for any rent rebate and for the 9d. charge for electricity :—

No change	s. d. 1 0	s. d. 1 6	s. d. 2 0	s. d. 2 6	s. d. 3 0	s. d. 3 6	s. d. 4 0	s. d. 4 6	s. d. 5 0	s. d. 5 6
45	68	35	24	31	17	23	18	14	6	6

s. d. 6 0	s. d. 6 6	s. d. 7 0	s. d. 7 6	s. d. 8 0	s. d. 8 6	s. d. 9 0	s. d. 9 6	s. d. 10 0	No infor- mation	De- crease
3	7	3	1	—	2	—	1	—	50	54

In 54 cases there was a decrease in the amount paid, generally of a shilling and under, except in those cases of tenants who had been living in shops and paying high rents.

Increase in Cost of Transport.

Hulme is within a mile of the centre of town, and by far the greater number of its residents walk to their work. It is an easy place to walk from to any part of the town. Consequently transport was, before removal, a very low charge. Also a large percentage work in rubber works in Hulme, and are, therefore, not used to any cost at all for transport.

The following table shows the increase (if any) in cost of transport per family per week :—

s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1 0	1 6	2 0	2 6	3 0	3 6	4 0	4 6	5 0	5 6
14	17	27	23	25	8	24	8	12	2
s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
6 0	6 6	7 0	7 6	8 0	8 6	9 0	9 6	10 0	10 6
8	7	1	1	7	1	2	0	4	1

Decreases (4).

These figures represent the increased weekly cost in transport per family of 196 families. In an additional 64 families the main transport was by bicycle. It does not follow that in the other 148 families interviewed there was no increase : it was obviously impossible to obtain the detailed cost of increase in transport for every member of every family. Admittedly, there is not an increase in the cost of transport in every family, but the cost falls unevenly, and in many cases where the family income is low the increase in the cost of transport is high. If transport could be considered when rent rebates are calculated much hardship might be avoided.

Many men go by bicycle, but bicycles do not fall from heaven. They are generally purchased on an instalment basis of from 1s. 6d. to 2s. 6d. a week. It is usually allowed to be healthy, and, even where short cuts can be taken, in certain cases a saving of time. At least there is no need to stand and wait for the bus. There does not seem to be any dislike for this means of transport ; in fact several expressed preference for it, particularly those who have to travel through Wythenshawe. Two or three said that they had never known what the country was like until they saw the daffodils growing “ wild ” on the Princess Parkway. In some few cases men who would otherwise have used a bicycle, were not able to do so owing to some health reason—or even to an injury left from the war, or because they were afraid of the traffic.

General Expense.

In certain estates complaints were made of high costs through lack of competition between shops, but these were confined to the remoter estates. Otherwise, remarkably few complaints were made of the cost of shopping—except in regard to bacon and meat. When men go out to heavy work they must have breakfast ; and bacon is practically a necessity ; and it was almost universally claimed that it was necessary, on grounds of economy, to go to Hulme to buy it.

Many had been in the habit of buying ends of bacon at low prices. Good bacon, but the end of the roll, which, when sliced, although fat, makes good food and is cheaper than rashers.

Meat was often said to be dear, and some resentment was felt because of a belief that the price varied from customer to customer.

A comparison of food prices in different parts of the town would be valuable.

Possibly, if this need persists, it could be met by the teaching of simple cookery and of economical shopping in the Child Welfare Centres. It is not easy to find times at which mothers with young children are free to attend centres to learn cookery, but if there is a need it is probable that some means could be devised to meet it.

Already some mothers said they were baking cakes, and making puddings in the ovens of the back-to-back grates, which they had not been able to do before. "Only they eat it up so quickly," said one mother, whose kitchen smelt deliciously of hot scones; "I only do them on Thursdays," she explained, "but they come home quick enough on Thursdays."

Houses or Flats.

In the consideration of the rehousing of tenants from the Hulme area, the question of large blocks of flats did not enter. There are small blocks of flats, of four flats, on the Anson Estate and on other housing estates, and Hulme tenants have been moved into those, but in no case was a tenant moved from the Hulme area and rehoused in a large block of flats. This report is not, therefore, concerned with the controversy of separate houses versus large blocks of flats, but with the small blocks of four as compared with separate houses.

There does not seem to be any doubt that the house with its own garden plot is the most satisfactory type of house for a family. Practically all the tenants rehoused in flats would rather have had a house. The rent of the flats in the Anson Estate was temptingly low and the district was not too far out of town, and so the Anson Estate was in many cases given as first choice. It is a charming estate, and both houses and flats are good to look at and are well liked; but nearly every tenant would rather have a house than a flat. The reasons given were:—

1. The smaller flats are on the ground floor and the larger ones upstairs (the reason for this arrangement being the possibility of economically providing extra bedrooms on the upper floors), so that the big families of young children are in the upper flats where they have to come down and up stairs to the road, and ground floor flats are usually under rooms where children are running about and so are noisy.
2. They feel that a house is their own home, and has more privacy. Even in small blocks of flats doorway faces doorway, with very little space between, and it is felt that there is not much private life under these conditions.

There are certain exceptions. In the case of old couples, or of single persons, the extra protection of neighbours in the same block is often a comfort, but on the whole there is no doubt that from the tenants' point of view a house is much more a home than a flat can ever be.

This expression of opinion is, naturally, not a fully-considered opinion on the merits of small blocks of flats or flatted houses, but is the view of those tenants visited who have been rehoused in small blocks of flats. The investigators are not qualified to give technical views, but they found that, in the majority of cases, tenants moved into cottage homes had settled more quickly and more happily than those who were rehoused in flats.

Recommendations.

I. The main recommendations that we would like to make is the experiment of using trained women property managers. This is not in any way a complaint that men officials and rent collectors do not fulfil their duties with kindness as well as efficiency ; nor does it ask that men shall be dismissed or replaced by women. The suggestion is made because to the investigators there appeared to be an obvious need for help—before removal as well as afterwards—help that could only be given by getting into the house and talking to tenants. It is probably generally easier for a woman to get into a house, and women will talk to women, and can be helped and advised very often in a way in which it is impossible for a man to do. Many municipalities are finding, after dealing with slum clearance, that they have a stratum of tenants who do not make good tenants, and are concerned with this problem. The alternatives which are usually being weighed, are the appointment of trained women property managers or of welfare supervisors. There does not appear to us to be any doubt as to the fact that the chances of success in the appointment of trained women far outweigh those of welfare superintendents. In the first place, the trained woman property manager would not only visit beforehand and prepare and sift the tenants, but would continue to look after the tenants after they were removed, and that as a matter of course and with the right of approach for the collection of rent. The employment of welfare superintendents to deal with the bad tenants would mean that every house that the welfare superintendent visited would be branded as “dirty” by the neighbours, and it would not be as easy to reinstate them as if the person who HAD to go in to collect the rent had quietly and unnoticeably dealt with the matter.

We would suggest that an experiment be tried. That sufficient trained women property managers be appointed to manage one large block of flats ; to see the people before they are removed ; and to act as rent collector and manager after tenants are moved in. Again those tenants who need extra advice and help could more easily be influenced by some one who had to come to collect rents, and who could give the necessary advice without *too plainly showing there was need for complaint*. It is usually said that women property managers can take fewer cases, and that they are therefore more expensive, but against that must be weighed the fact that some extra appointments will have to be made if the unsatisfactory type of tenant is to be dealt with. The commencing salary of a trained property manager is £250—£300, and for an assistant £180—£200.

2. We are convinced that the supply of slot meters for electricity as against the charge of 9d. a week in rent would be very helpful—a very large number of tenants complained of heavy bills for electricity. In some cases there was an obvious reason for the first bill. Several tenants had been using high-powered bulbs ; one had had a 200 bulb given and had had a big bill in consequence. In another case the tenant visited had not been in the house long, but said, “ Oh no, I know we shall be all right because we are using our electricity as hard as we can. I know that the more you use the cheaper it is.” In these and in other cases, if slot meters were provided tenants could only use the amount of current which they could afford, and could not run up bills.

3. In the calculation of rent rebates, any increased cost of transport should be included.

4. We also suggest the abolition of the time limit after removal for an application for a rent rebate.

5. In view of the fact that so many tenants are so evidently finding in their gardens great pleasure and use, we would like to recommend that provision should be made for the giving of advice by a larger number of skilled gardeners employed by the municipality. We believe that even better results would be obtained, and that the encouragement of advice and guidance would be highly appreciated.

In conclusion, we believe that a large proportion of the families rehoused are happier and healthier for the change. If it were not for financial anxiety, it would probably be possible to say practically all are both healthier and happier.

We tried to find exactly what they thought about it all, and they received us courteously and told us willingly. It is not easy really to understand other people's lives. It is easy to talk glibly of sympathy, but it is not easy to understand anything which is outside one's own personal experience. Even those who have years of social work to their credit, or who have lived in the middle of congested areas and worked in crowded streets and houses—even, indeed, nurses—who are acquainted with every shift to which poverty is put, cannot really know, because a term is put to their personal experience. There comes a time in the life of the most ardent social worker when he can wash his hands and his body of the grime and rest his mind from the noise and the squalor. He is spared that bogey of poverty—the ever-present shadow of destitution, the loss of the little they have, the inability to put aside that little towards winter's coal or for old age—the “sack.” So there may be much that we have omitted, but what really impressed us most of all was the gallant attempt to make a success of things.

In conclusion we would like to thank all those who helped to make this investigation possible, Dr. Veitch Clark, Medical Officer of Health, who gave encouragement and advice, and the staff of the Public Health Department for their valuable assistance and information.

Particularly we wish to thank tenants who, by their courtesy and willingness to be interviewed, made the work easy and pleasant.

To the best of our belief all the information contained in the report is strictly true.

MAUD GATES.

EDITH CHORLTON.

BRIDE FREMANTLE.

30th May, 1935.

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